

Request- Jan Delaval
SEARCH REQUEST FORM

Access DB#

150337

Scientific and Technical Information Center

Requester's Full Name: Sabiha Qaz Examiner #: 74141 Date: 4/9/05
 Art Unit: 1616 Phone Number (H) 20622 Serial Number: 10/821,479
 Mail Box and Bldg/Room Location 20 Results Format Preferred (circle): PAPER DISK E-MAIL
4C70 Rem, 4A45
 If more than one search is submitted, please prioritize searches in order of need. mej

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc. if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: 2 Propylidene
 Inventors (please provide full names): DeLuca et al.

Earliest Priority Filing Date: 4/9/04 60/461,958 (4/10/2003)
 For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number. 1-18

Please search for the 2-propylidene -
 19-Nor Vitamin D compds as in
 Cl 1 and their use.

Please see specific compd of cls 12-16

Please see attached sheet

Thank you

STAFF USE ONLY

Searcher: <u>67</u>	Type of Search	Vendors and cost where applicable
Searcher Phone #: <u>22504</u>	NA Sequence (#) _____	STN <u>✓</u>
Searcher Location: _____	AA Sequence (#) _____	Dialog _____
Date Searcher Picked Up <u>4/18/06</u>	Structure (H) <u>✓</u>	Questel/Orbit _____
Date Completed <u>4/18/06</u>	Bibliographic _____	Dr. Link _____
Searcher Prep. Review Time _____	Litigation _____	Lexis/Nexis _____
Critical Prep. me. <u>15</u>	Fulltext _____	Sequence Systems _____
Online Time <u>+15</u>	Patent Family _____	WWW/Internet _____
	Other _____	Other (specify) _____

=> fil reg

FILE 'REGISTRY' ENTERED AT 13:34:21 ON 18 APR 2005

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 17 APR 2005 HIGHEST RN 848640-07-3

DICTIONARY FILE UPDATES: 17 APR 2005 HIGHEST RN 848640-07-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

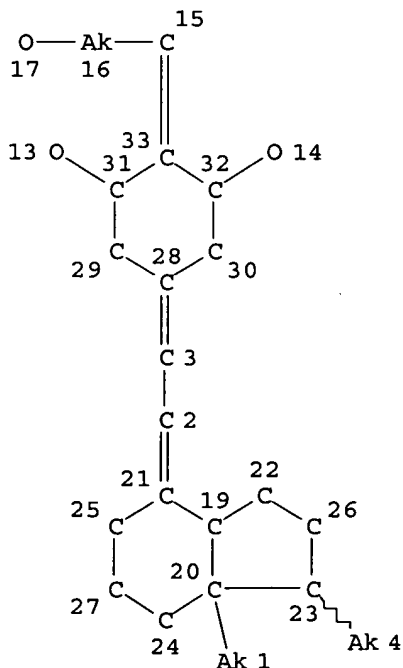
*
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
*

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d sta que l16

L14 STR



NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 23 28
NUMBER OF NODES IS 24

STEREO ATTRIBUTES: NONE
L16 25 SEA FILE=REGISTRY SSS FUL L14

100.0% PROCESSED 200 ITERATIONS 25 ANSWERS
SEARCH TIME: 00.00.01

=> d his

(FILE 'HOME' ENTERED AT 13:23:32 ON 18 APR 2005)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 13:24:26 ON 18 APR 2005

L1 1 S US20040229851/PN OR (US2004-821479# OR WO2004-US11059 OR US20
SEL RN

FILE 'REGISTRY' ENTERED AT 13:25:06 ON 18 APR 2005

L2 41 S E1-E41
L3 1 S L2 AND C31H52O5
E C31H52O5/MF
L4 13 S E3 AND C5-C6/ES AND C6/ES AND 3/NR
L5 4 S L2 AND C29H48O4
E C29H48O4/MF
L6 58 S E3 AND C5-C6/ES AND C6/ES AND 3/NR
L7 54 S L6 NOT L5
L8 5 S L3,L5
SEL RN
L9 0 S E1-E5/CRN
L10 STR
L11 0 S L10 CSS SAM
L12 STR L10
L13 1 S L12
L14 STR L12
L15 1 S L14
L16 25 S L14 FUL
SAV L16 QAZI821/A
L17 20 S L16 NOT L8

FILE 'HCAOLD' ENTERED AT 13:32:55 ON 18 APR 2005

L18 0 S L8
L19 0 S L17

FILE 'HCAPLUS' ENTERED AT 13:33:00 ON 18 APR 2005

L20 2 S L8
L21 4 S L17
L22 2 S L20,L21 AND (DELUCA ? OR DE LUCA ? OR SICINSKI ? OR GLEBOCKA
L23 2 S L20,L21 NOT L22
L24 4 S L20-L23

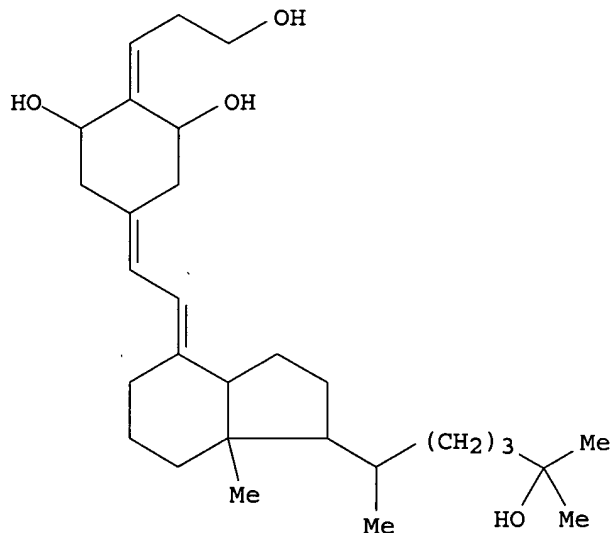
FILE 'USPATFULL, USPAT2' ENTERED AT 13:34:07 ON 18 APR 2005

L25 1 S L8 OR L17

FILE 'REGISTRY' ENTERED AT 13:34:21 ON 18 APR 2005

=> d ide can tot l8

L8 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
RN 781664-72-0 REGISTRY
ED Entered STN: 16 Nov 2004
CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2Z,3 β ,7E,20S)- (9CI) (CA INDEX NAME)
MF C29 H48 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

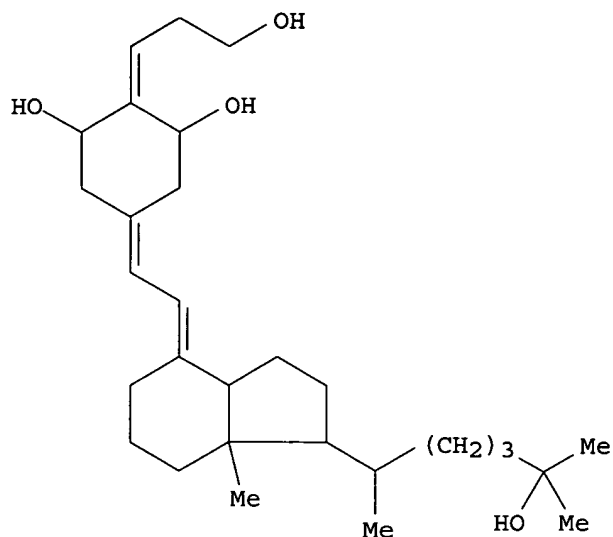


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:380071

L8 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
RN 781664-71-9 REGISTRY
ED Entered STN: 16 Nov 2004
CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2E,3 β ,7E,20S)- (9CI) (CA INDEX NAME)
MF C29 H48 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:380071

L8 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN

RN 781664-41-3 REGISTRY

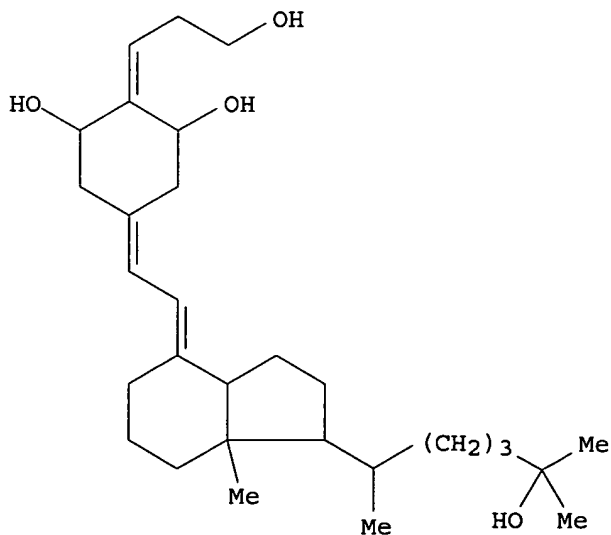
ED Entered STN: 16 Nov 2004

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2Z,3 β ,7E)-(9CI) (CA INDEX NAME)

MF C29 H48 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

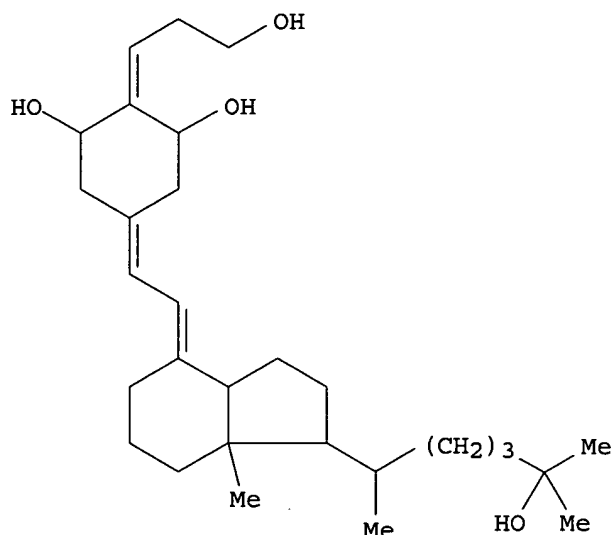


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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:380071

L8 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
RN 781664-40-2 REGISTRY
ED Entered STN: 16 Nov 2004
CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2E,3 β ,7E)- (9CI) (CA INDEX NAME)
MF C29 H48 O4
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

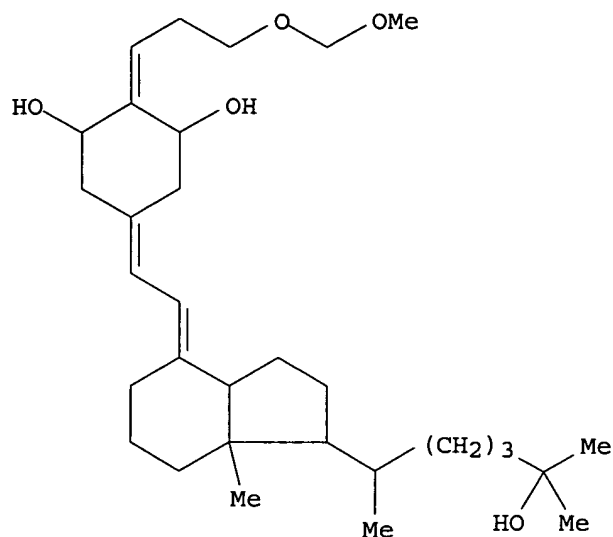


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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:380071

L8 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2005 ACS on STN
RN 766529-87-7 REGISTRY
ED Entered STN: 21 Oct 2004
CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-[3-(methoxymethoxy)propylidene]-, (1 α ,3 β ,6E,7E)- (9CI) (CA INDEX NAME)
MF C31 H52 O5
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:380071

REFERENCE 2: 141:314479

=> d ide can tot l17

L17 ANSWER 1 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN

RN 781664-70-8 REGISTRY

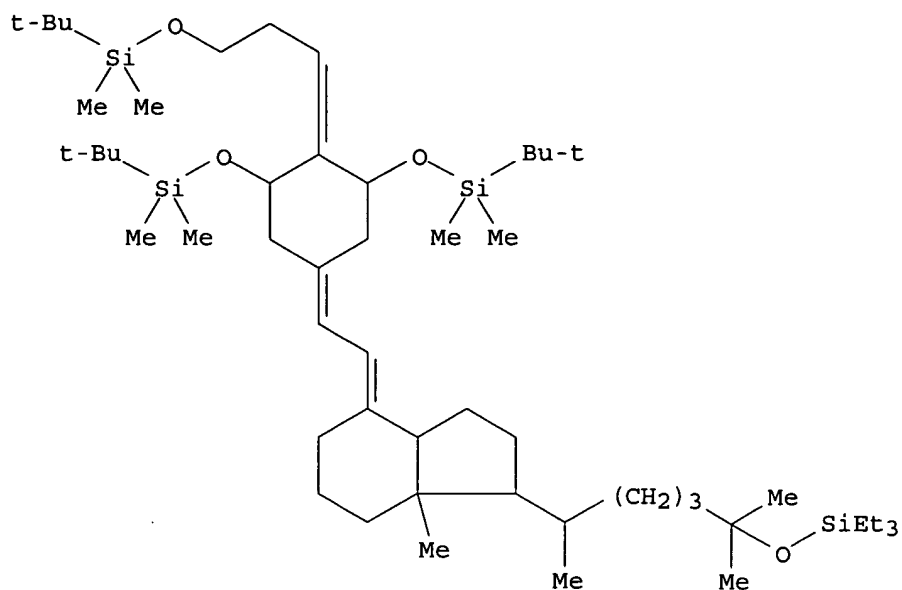
ED Entered STN: 16 Nov 2004

CN Silane, [[(1 α ,2Z,3 β ,7E)-2-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]propylidene]-25-[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7-diene-1,3-diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)

MF C53 H104 O4 Si4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

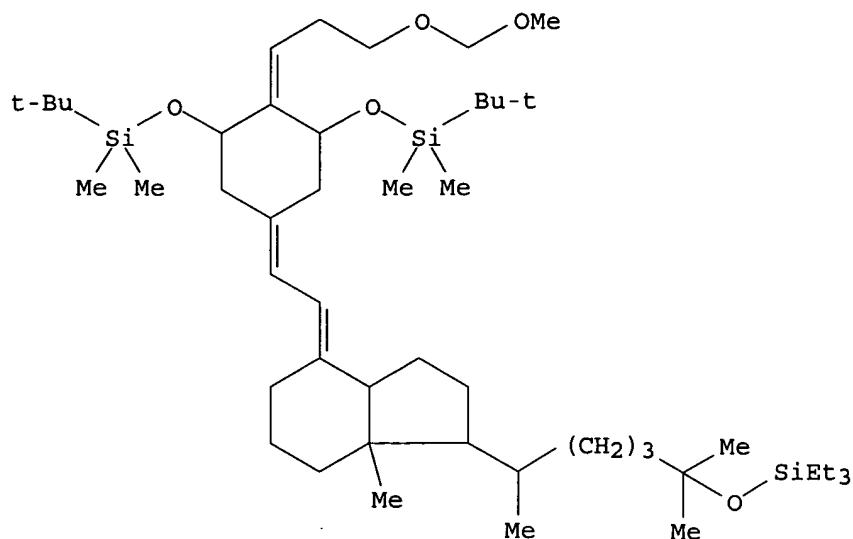


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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:380071

L17 ANSWER 3 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 766529-93-5 REGISTRY
ED Entered STN: 21 Oct 2004
CN Silane, [[(1 α ,3 β ,6E,7E)-2-[3-(methoxymethoxy)propylidene]-25-
[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7,10(19)-triene-1,3-
diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)
MF C49 H94 O5 Si3
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:380071

REFERENCE 2: 141:314479

L17 ANSWER 4 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN

RN 737757-31-2 REGISTRY

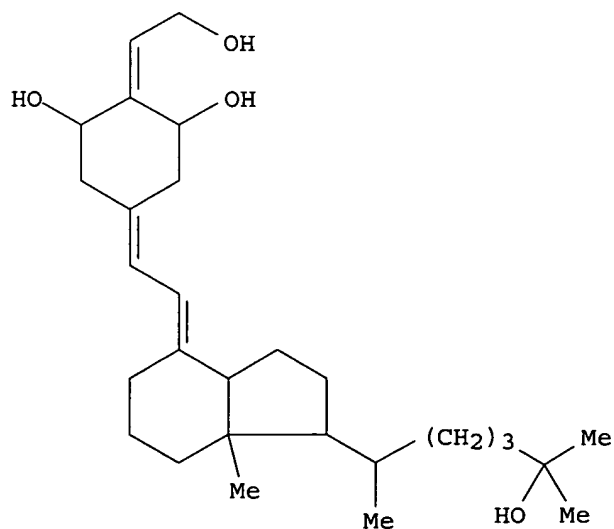
ED Entered STN: 02 Sep 2004

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(2-hydroxyethylidene)-, (1 α ,2Z,3 β ,7E) - (9CI) (CA INDEX NAME)

MF C28 H46 O4

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER



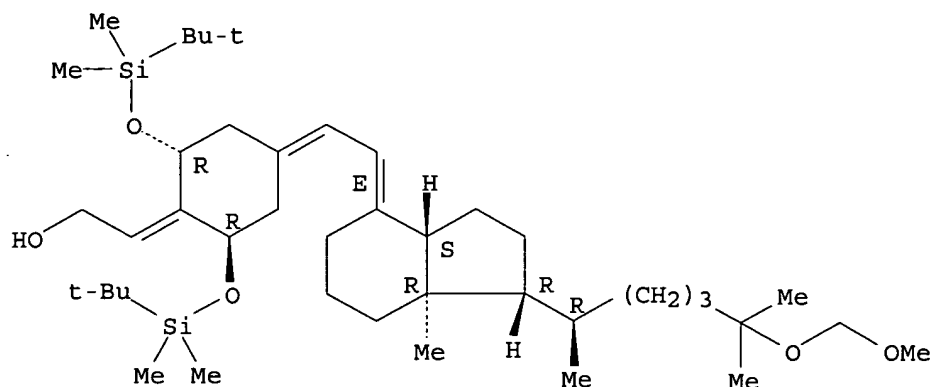
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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185222

L17 ANSWER 5 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 736982-54-0 REGISTRY
ED Entered STN: 01 Sep 2004
CN Ethanol, [(1 α ,3 β ,7E)-1,3-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-25-(methoxymethoxy)-19-nor-9,10-secocholesta-5,7-dien-2-ylidene]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C42 H78 O5 Si2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.
Double bond geometry as shown.

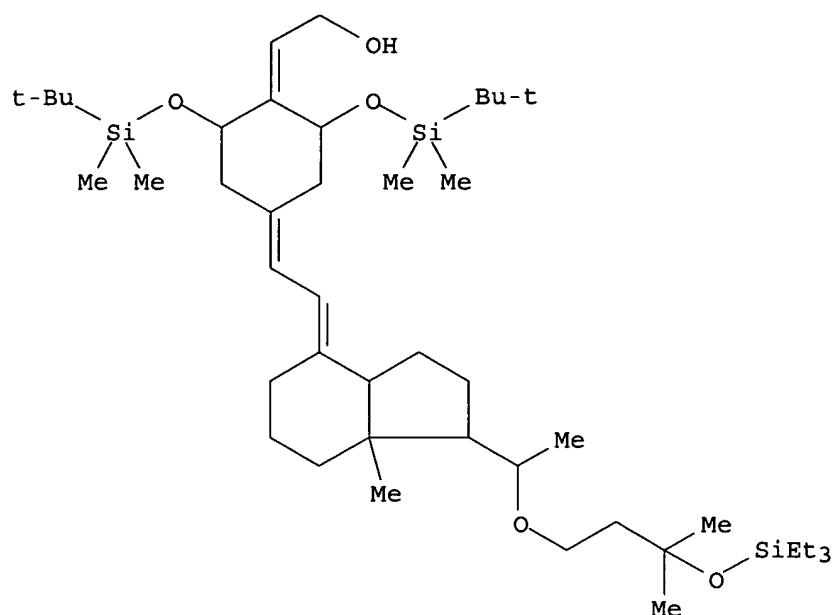


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:185222

L17 ANSWER 6 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681856-71-3 REGISTRY
ED Entered STN: 14 May 2004
CN Ethanol, 2-[2,6-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-4-[[octahydro-7a-methyl-1-[1-[3-methyl-3-[(triethylsilyl)oxy]butoxy]ethyl]-4H-inden-4-ylidene]ethylidene]cyclohexylidene]-, stereoisomer (9CI) (CA INDEX NAME)
MF C45 H86 O5 Si3
SR CA
LC STN Files: CA, CAPLUS

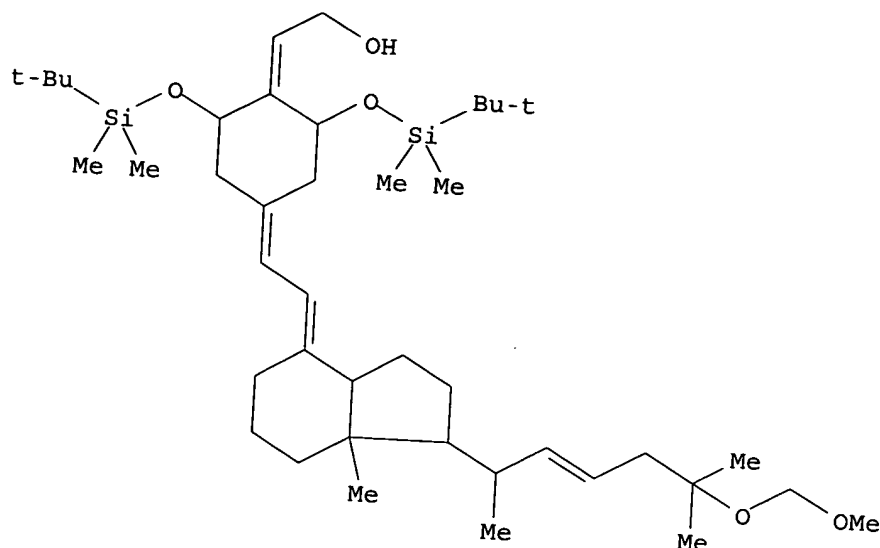


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 7 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681856-70-2 REGISTRY
ED Entered STN: 14 May 2004
CN Ethanol, 2-[(1 α ,3 β ,7E,22E)-1,3-bis[[1,1-dimethylethyl]dimethylsilyl]oxy]-25-(methoxymethoxy)-19-nor-9,10-secocholesta-5,7,22-trien-2-ylidene]-, (2Z)- (9CI) (CA INDEX NAME)
MF C42 H76 O5 Si2
SR CA
LC STN Files: CA, CAPLUS



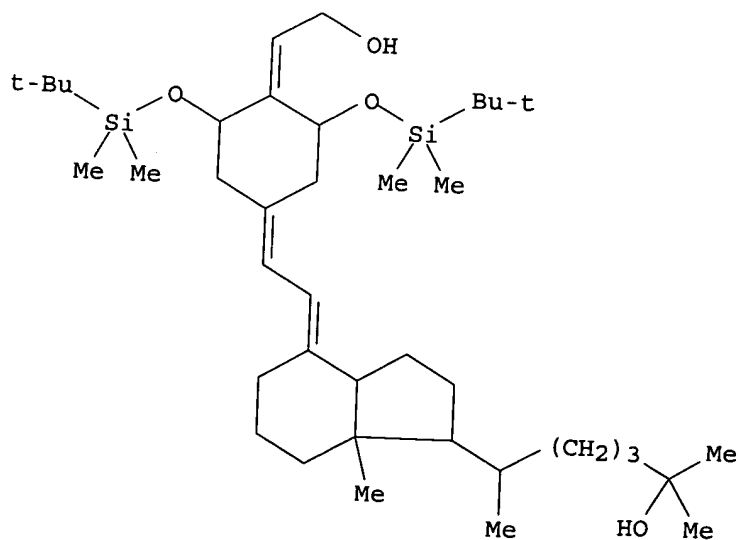
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1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 8 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 681856-69-9 REGISTRY
 ED Entered STN: 14 May 2004
 CN 19-Nor-9,10-secocholesta-5,7-dien-25-ol, 1,3-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(hydroxyethylidene)-,
 (1 α ,2Z,3 β ,7E,20S)- (9CI) (CA INDEX NAME)
 MF C40 H74 O4 Si2
 SR CA
 LC STN Files: CA, CAPLUS

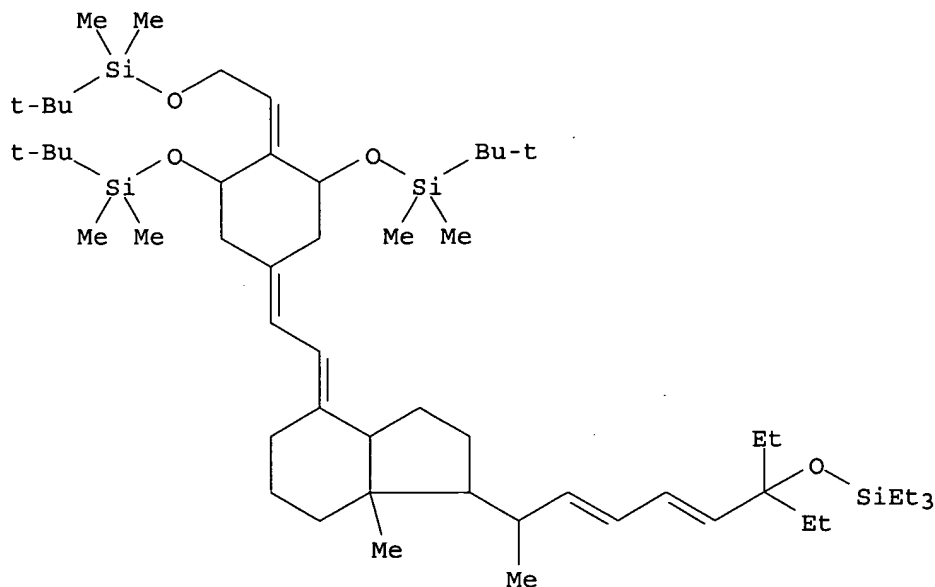


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 9 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681831-10-7 REGISTRY
ED Entered STN: 14 May 2004
CN Silane, [[[1R,3R)-2-[(1E)-2-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethylidene]-5-[(2E)-[(1R,3aS,7aR)-1-[(1R,2E,4E)-6-ethyl-1-methyl-6-[(triethylsilyl)oxy]-2,4-octadienyl]octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-1,3-cyclohexanediyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)
MF C55 H104 O4 Si4
SR CA
LC STN Files: CA, CAPLUS

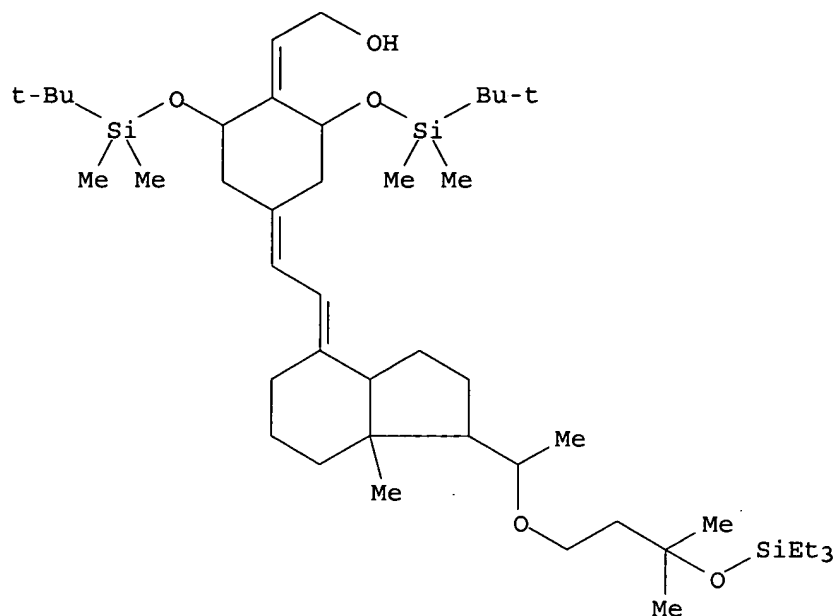


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1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 10 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681831-08-3 REGISTRY
ED Entered STN: 14 May 2004
CN Ethanol, 2-[2,6-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-4-[[octahydro-7a-methyl-1-[1-[3-methyl-3-[(triethylsilyl)oxy]butoxy]ethyl]-4H-inden-4-ylidene]ethylidene]cyclohexylidene]-, stereoisomer (9CI) (CA INDEX NAME)
MF C45 H86 O5 Si3
SR CA
LC STN Files: CA, CAPLUS

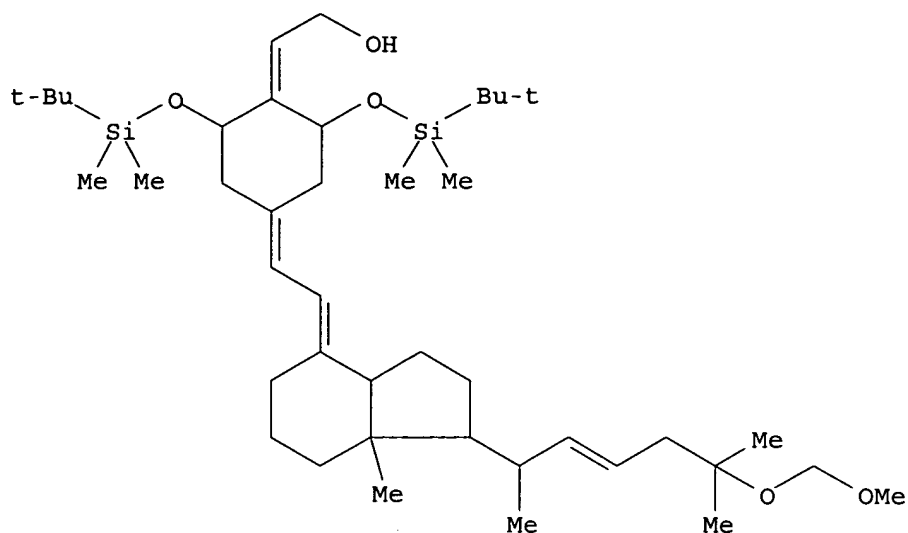


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REFERENCE 1: 140:357542

L17 ANSWER 11 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681831-07-2 REGISTRY
ED Entered STN: 14 May 2004
CN Ethanol, 2-[(1 α ,3 β ,7E,22E)-1,3-bis[[1,1-dimethylethyl]dimethylsilyl]oxy]-25-(methoxymethoxy)-19-nor-9,10-secocholesta-5,7,22-trien-2-ylidene]-, (2E)- (9CI) (CA INDEX NAME)
MF C42 H76 O5 Si2
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 12 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN

RN 681831-02-7 REGISTRY

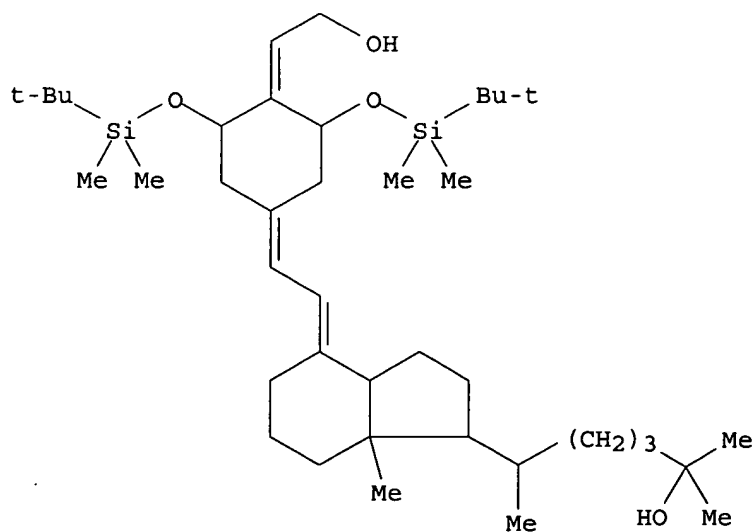
ED Entered STN: 14 May 2004

CN 19-Nor-9,10-secocholesta-5,7-dien-25-ol, 1,3-bis[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(2-hydroxyethylidene)-, (1 α ,2E,3 β ,7E,20S) - (9CI) (CA INDEX NAME)

MF C40 H74 O4 Si2

SR CA

LC STN Files: CA, CAPLUS

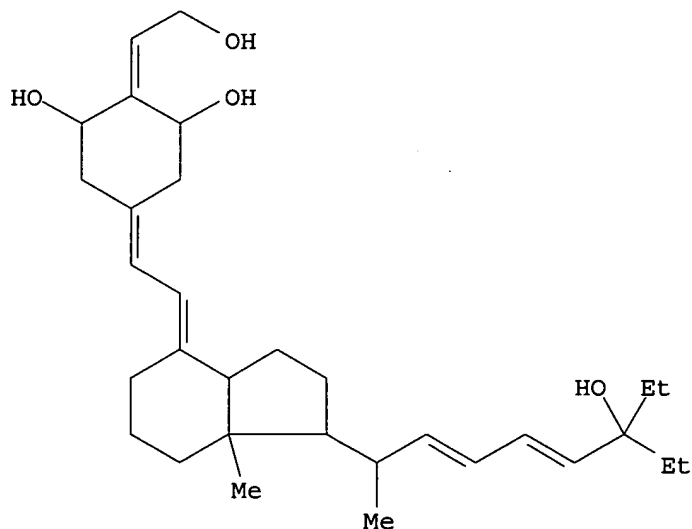


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 13 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681830-85-3 REGISTRY
ED Entered STN: 14 May 2004
CN 1,3-Cyclohexanediol, 5-[[1-(6-ethyl-6-hydroxy-1-methyl-2,4-octadienyl)octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-2-(2-hydroxyethylidene)-, stereoisomer (9CI) (CA INDEX NAME)
MF C31 H48 O4
SR CA
LC STN Files: CA, CAPLUS

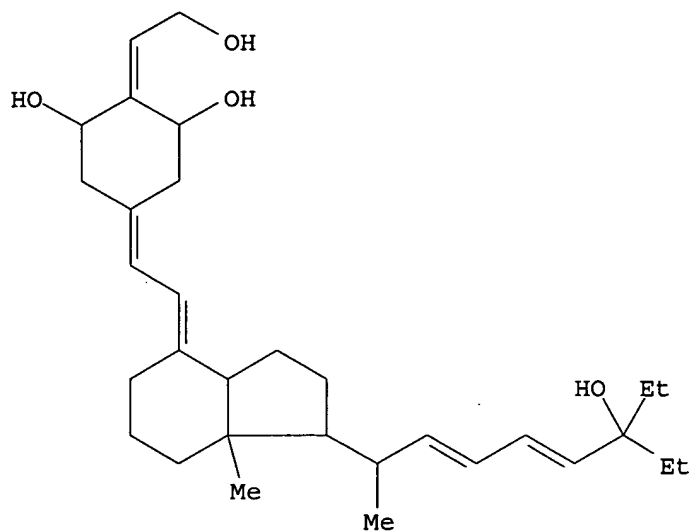


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 14 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681830-84-2 REGISTRY
ED Entered STN: 14 May 2004
CN 1,3-Cyclohexanediol, 5-[[1-(6-ethyl-6-hydroxy-1-methyl-2,4-octadienyl)octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-2-(2-hydroxyethylidene)-, stereoisomer (9CI) (CA INDEX NAME)
MF C31 H48 O4
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 15 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN

RN 681830-75-1 REGISTRY

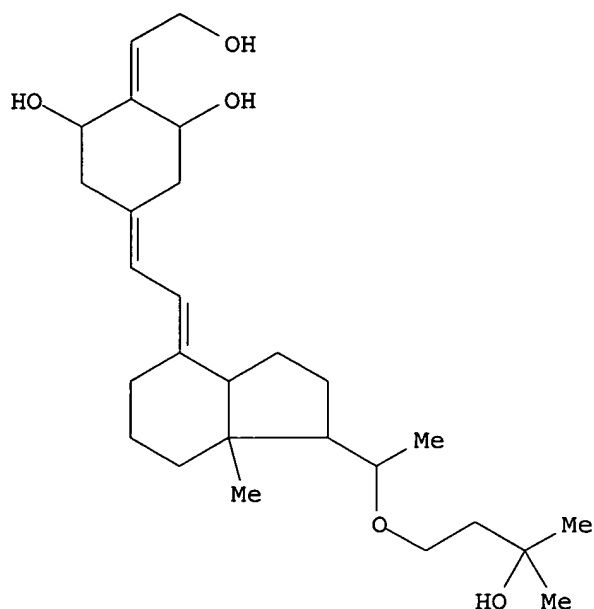
ED Entered STN: 14 May 2004

CN 1,3-Cyclohexanediol, 2-(2-hydroxyethylidene)-5-[[octahydro-1-[1-(3-hydroxy-3-methylbutoxy)ethyl]-7a-methyl-4H-inden-4-ylidene]ethylidene]-, stereoisomer (9CI) (CA INDEX NAME)

MF C27 H44 O5

SR CA

LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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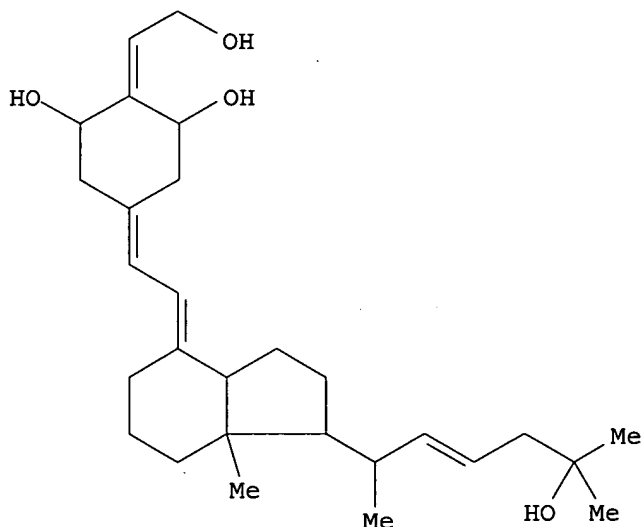
L17 ANSWER 16 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681830-74-0 REGISTRY
ED Entered STN: 14 May 2004
CN 1,3-Cyclohexanediol, 2-(2-hydroxyethylidene)-5-[[octahydro-1-[1-(3-hydroxy-3-methylbutoxy)ethyl]-7a-methyl-4H-inden-4-ylidene]ethylidene]-, stereoisomer (9CI) (CA INDEX NAME)
MF C27 H44 O5
SR CA
LC STN Files: CA, CAPLUS

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 18 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681830-66-0 REGISTRY
ED Entered STN: 14 May 2004
CN 19-Nor-9,10-secocholesta-5,7,22-triene-1,3,25-triol, 2-(2-hydroxyethylidene)-, (1 α ,2E,3 β ,7E,22E)- (9CI) (CA INDEX NAME)
MF C28 H44 O4
SR CA
LC STN Files: CA, CAPLUS

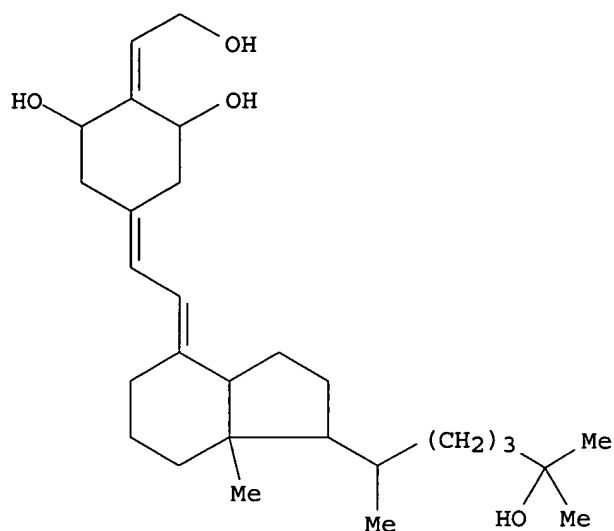


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 19 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN
RN 681830-61-5 REGISTRY
ED Entered STN: 14 May 2004
CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(2-hydroxyethylidene)-, (1 α ,2Z,3 β ,7E,20S)- (9CI) (CA INDEX NAME)
MF C28 H46 O4
SR CA
LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

L17 ANSWER 20 OF 20 REGISTRY COPYRIGHT 2005 ACS on STN

RN 681830-60-4 REGISTRY

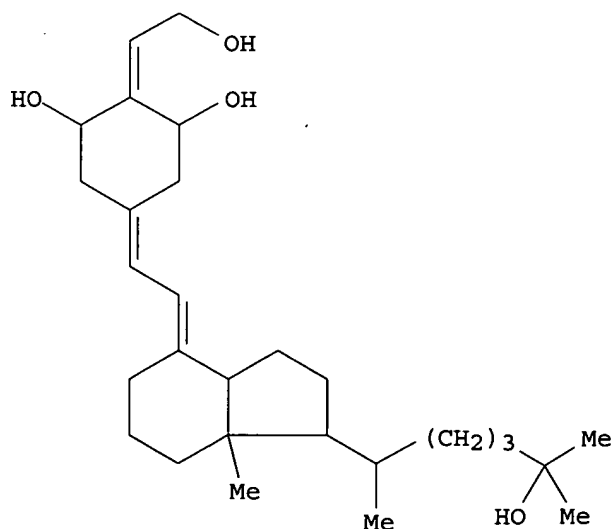
ED Entered STN: 14 May 2004

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(2-hydroxyethylidene)-,
(1α,2E,3β,7E,20S)-(9CI) (CA INDEX NAME)

MF C28 H46 O4

SR CA

LC STN Files: CA, CAPLUS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 140:357542

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 13:34:37 ON 18 APR 2005

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FILE LAST UPDATED: 17 Apr 2005 (20050417/ED)

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=> d all hitstr tot 124

L24 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2004:902336 HCAPLUS
DN 141:380071
ED Entered STN: 28 Oct 2004
TI Preparation of 2-propylidene-19-norvitamin D compounds for pharmaceutical use
IN Deluca, Hector F.; Sicinski, Rafal R.; Glebocka, Agnieszka; Plum, Lori A.
PA Wisconsin Alumni Research Foundation, USA
SO PCT Int. Appl., 91 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C401-00
CC 32-7 (Steroids)
Section cross-reference(s): 1, 63

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004092118	A2	20041028	WO 2004-US11059	20040409
	WO 2004092118	A3	20050127		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,			

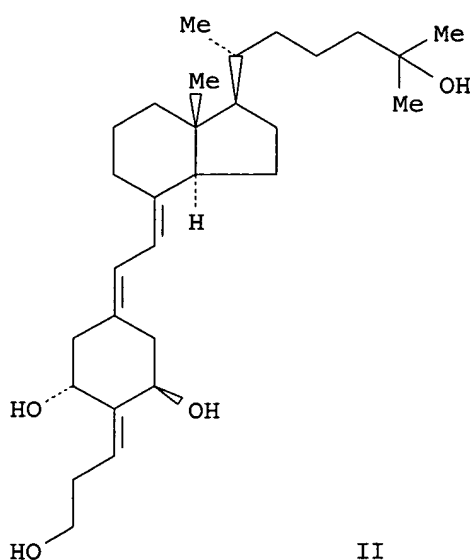
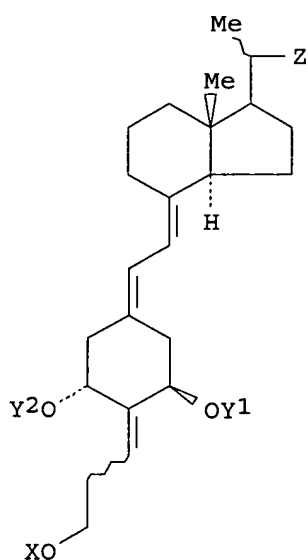
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 ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
 SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN,
 TD, TG

US 2004229851 A1 20041118 US 2004-821479 20040409
 PRAI US 2003-461958P P 20030410

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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WO 2004092118	ECLA	C07F007/18C4D4D
OS MARPAT 141:380071		
GI		

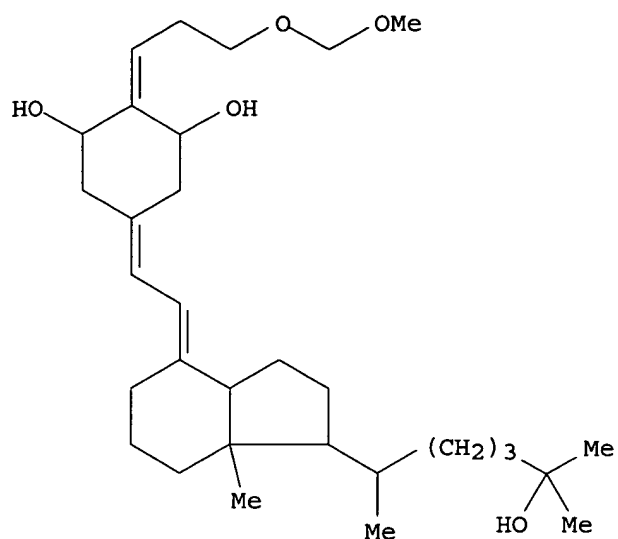
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004092118	ICM	C07C401-00
WO 2004092118	ECLA	C07F007/18C4D4D
OS MARPAT 141:380071		
GI		



- AB 2-Propylidene-19-norvitamin D compds. of formula I [Y1, Y2 = H, protecting group; X = H, alkyl, protecting group, hydroxyalkyl, alkoxyalkyl, aryloxyalkyl; Z = H, Me, acyl, (substituted) OH, CH2OH, etc.] are prepared for pharmaceutical use. These compds. are characterized by high bone calcium mobilization activity and high intestinal calcium transport activity. This results in novel therapeutic agents for the treatment and prophylaxis of diseases where bone formation is desired, particularly osteoporosis, as well as autoimmune diseases such as multiple sclerosis, diabetes mellitus and lupus. These compds. also exhibit pronounced activity in arresting the proliferation of undifferentiated cells and inducing their differentiation to the monocyte thus evidencing use as an anti-cancer agent and for the treatment of skin diseases such as psoriasis. These compds. also increase both breaking strength and crushing strength of bones evidencing use in conjunction with bone replacement surgery such as hip and knee replacements. Thus, II was prepared and showed significant activity in promoting the differentiation of leukemia cells.
- ST vitamin D nor propylidene prepn antiosteoporotic antitumor
- IT Inflammation
 (Crohn's disease; preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics and antitumor agents)
- IT Intestine, disease
 (Crohn's; preparation of 2-propylidene-19-norvitamin D compds. as

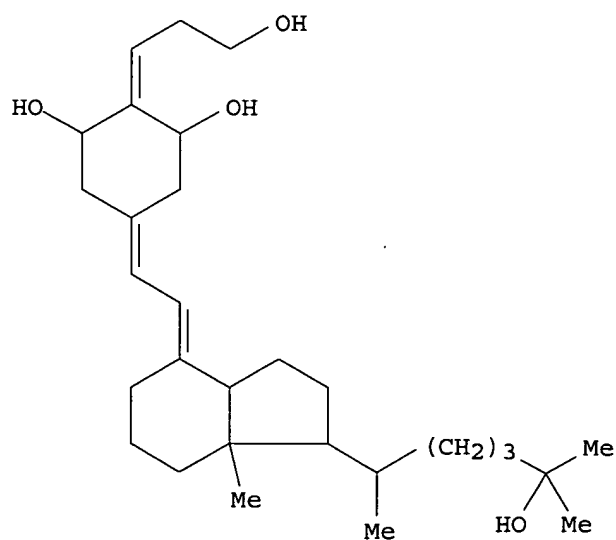
. antiosteoporotics and antitumor agents)
 IT Osteoporosis
 (antiosteoporotics; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Biological transport
 (calcium; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Intestine, neoplasm
 (colon; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Intestine, disease
 (inflammatory; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Drug delivery systems
 (oral; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Bone, disease
 (osteopenia; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Drug delivery systems
 (parenterals; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Osteoporosis
 (postmenopausal; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Antitumor agents
 Autoimmune disease
 Diabetes mellitus
 Human
 Leukemia
 Lupus erythematosus
 Mammary gland, neoplasm
 Multiple sclerosis
 Neoplasm
 Osteomalacia
 Prostate gland, neoplasm
 Psoriasis
 Skin, neoplasm
 (preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
 and antitumor agents)
 IT Vitamin D receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
 and antitumor agents)
 IT 9,10-Secosteroids
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
 and antitumor agents)
 IT Bone, disease
 (renal osteodystrophy; preparation of 2-propylidene-19-norvitamin D compds.
 as antiosteoporotics and antitumor agents)
 IT Drug delivery systems
 (transdermal; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT Inflammation
 Intestine, disease
 (ulcerative colitis; preparation of 2-propylidene-19-norvitamin D compds. as
 antiosteoporotics and antitumor agents)
 IT 164029-69-0P
 RL: BYP (Byproduct); PREP (Preparation)
 (preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics

and antitumor agents)
IT 766529-87-7P 781664-40-2P 781664-41-3P
781664-71-9P 781664-72-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
and antitumor agents)
IT 627-18-9, 3-Bromo-1-propanol 665-27-0 89031-84-5 144848-24-8
213250-68-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
and antitumor agents)
IT 78365-43-2P 120379-76-2P 163217-18-3P 194227-13-9P 766529-88-8P
766529-89-9P 766529-90-2P 766529-91-3P 766529-92-4P
766529-93-5P 766529-94-6P 766529-95-7P 766529-96-8P
766529-97-9P 780781-79-5P 780781-80-8P 780781-81-9P 780781-82-0P
780781-84-2P 781664-36-6P 781664-37-7P 781664-38-8P
781664-39-9P 781664-42-4P 781664-43-5P 781664-44-6P
781664-70-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)
(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
and antitumor agents)
IT 780781-83-1P 781664-45-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
and antitumor agents)
IT 7440-70-2, Calcium, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(transport; preparation of 2-propylidene-19-norvitamin D compds. as
antiosteoporotics and antitumor agents)
IT 766529-87-7P 781664-40-2P 781664-41-3P
781664-71-9P 781664-72-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
and antitumor agents)
RN 766529-87-7 HCAPLUS
CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-[3-
(methoxymethoxy)propylidene]-, (1 α ,3 β ,6E,7E)- (9CI) (CA INDEX
NAME)



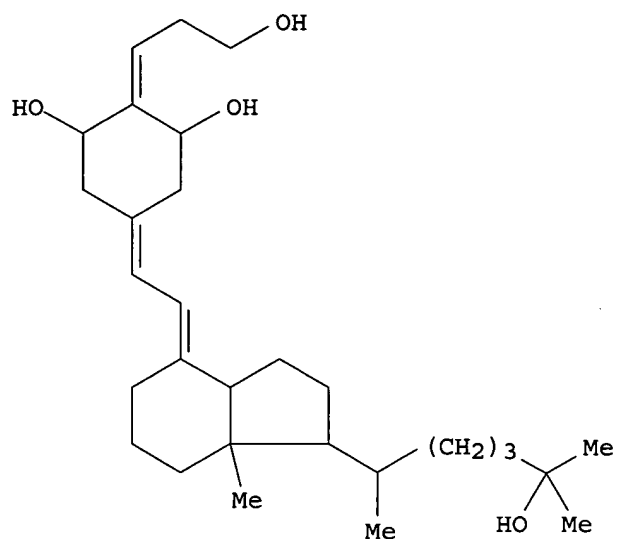
RN 781664-40-2 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-, (1 α ,2E,3 β ,7E)- (9CI) (CA INDEX NAME)



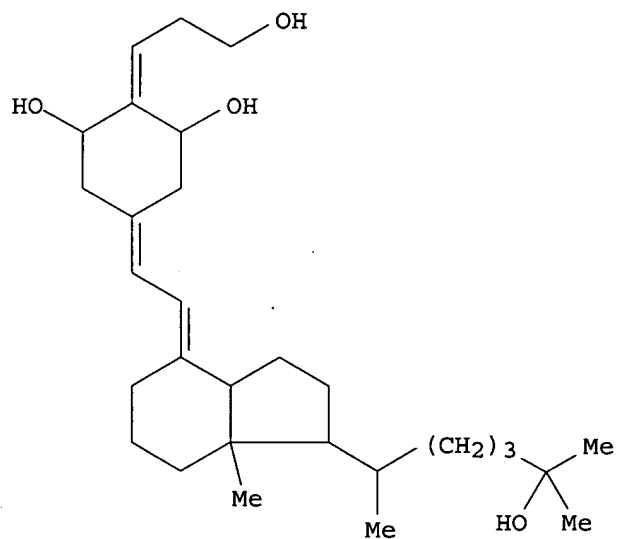
RN 781664-41-3 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-, (1 α ,2Z,3 β ,7E)- (9CI) (CA INDEX NAME)



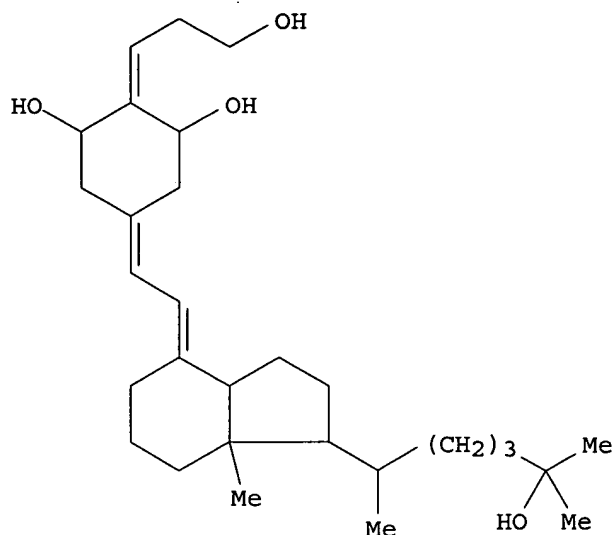
RN 781664-71-9 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2E,3 β ,7E,20S) - (9CI) (CA INDEX NAME)



RN 781664-72-0 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2Z,3 β ,7E,20S) - (9CI) (CA INDEX NAME)



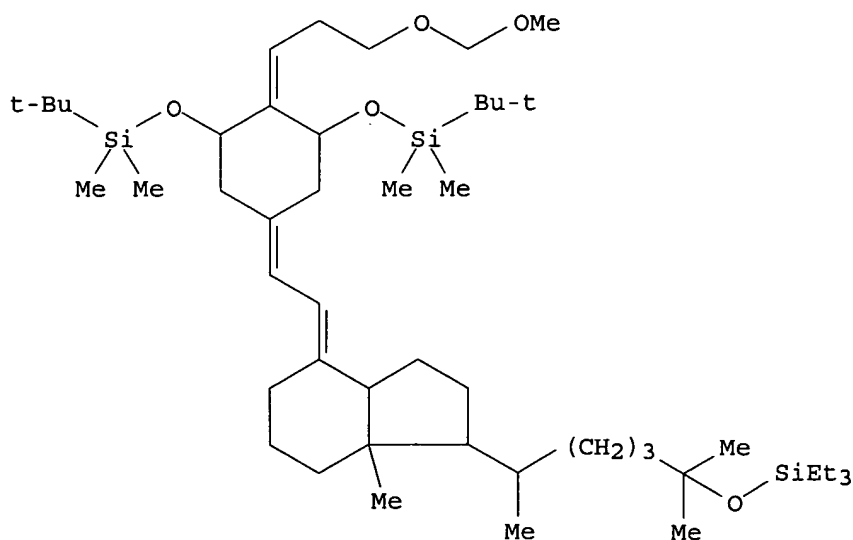
IT 766529-93-5P 781664-39-9P 781664-70-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics and antitumor agents)

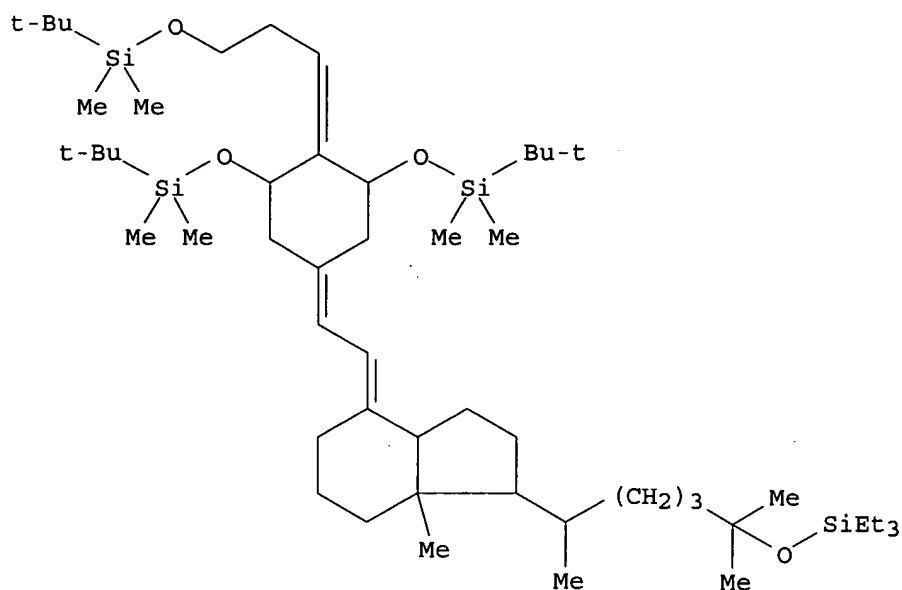
RN 766529-93-5 HCAPLUS

CN Silane, [[(1 α ,3 β ,6E,7E)-2-[3-(methoxymethoxy)propylidene]-25-[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7,10(19)-triene-1,3-diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



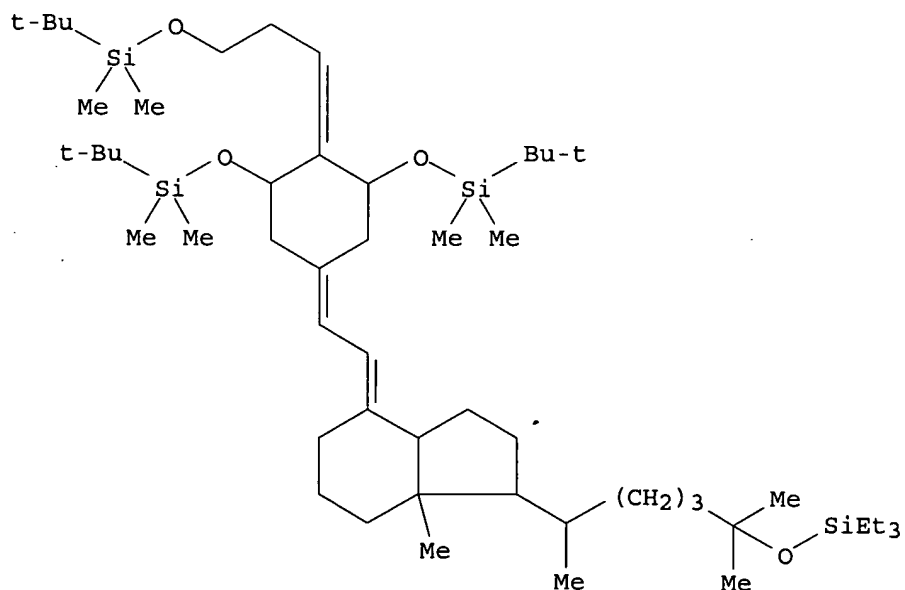
RN 781664-39-9 HCAPLUS

CN Silane, [[(1 α ,2E,3 β ,7E)-2-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]propylidene]-25-[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7-diene-1,3-diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



RN 781664-70-8 HCAPLUS

CN Silane, [[(1 α ,2Z,3 β ,7E)-2-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]propylidene]-25-[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7-diene-1,3-diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



L24 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:522172 HCAPLUS

DN 141:185222

ED Entered STN: 29 Jun 2004

TI Two-dimensional alanine scanning mutational analysis of the interaction between the vitamin D receptor and its ligands: studies of A-ring modified 19-norvitamin D analogs

AU Shimizu, Masato; Yamamoto, Keiko; Mihori, Mika; Iwasaki, Yukiko; Morizono,

Daisuke; Yamada, Sachiko
 CS Institute of Biomaterial and Bioengineering, Tokyo Medical and Dental
 University, Tokyo, 101-0062, Japan
 SO Journal of Steroid Biochemistry and Molecular Biology (2004), 89-90(1-5),
 75-81
 CODEN: JSBBEZ; ISSN: 0960-0760
 PB : Elsevier Science Ltd.
 DT Journal
 LA English
 CC 2-2 (Mammalian Hormones)
 AB To clarify the structure-function relationship (SFR) of vitamin D analogs
 in terms of their interaction with the vitamin D receptor (VDR), we have
 proposed a new approach, two-dimensional alanine scanning mutational anal.
 (2D-ASMA). In this paper, attention was focused on the interactions
 around the A-ring of vitamin D. For this purpose, we synthesized four new
 2-substituted 19-norvitamin D derivs. (3-6). The VDR affinity (3-6: 1, 5,
 2 and 1/140, resp.) and transcriptional activity (3-6: 10, 30, 2 and 0.3,
 resp.) of the four compds. were evaluated relative to 1,25-(OH)2D3 (5)
 (normalized to 1). Then, the transcriptional activities of wild-type and
 18 mutant VDRs induced by the four compds. (3-6) were investigated. The
 results of this 18+4 2D-ASMA were presented as a patch table, and
 the effects of the mutations were analyzed in comparison with the natural
 hormone (1) and 2-methylene-19-nor-20-epi-1,25-(OH)2D3 (2MD, 2). Of the
 four A-ring analogs, the 2 α -hydroxyethoxy derivative (3) showed striking
 differences in the pattern on the patch table. From the results, we
 suggest a docking mode of this compound (3) in which the A-ring adopts the
 α conformation.
 ST dihydroxyvitamin D3 analog receptor ligand binding structure activity
 relationship
 IT Proteins
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (complexes, of VDR and 1,25(OH)2D3 analog; two-dimensional alanine
 scanning mutational anal. of interaction between the vitamin D receptor
 and its ligands: studies of A-ring modified 19-norvitamin D analogs)
 IT Molecular modeling
 (of VDR and 1,25(OH)2D3 analog complex; two-dimensional alanine
 scanning mutational anal. of interaction between the vitamin D receptor
 and its ligands: studies of A-ring modified 19-norvitamin D analogs)
 IT Mutagenesis
 (of VDR; two-dimensional alanine scanning mutational anal. of
 interaction between the vitamin D receptor and its ligands: studies of
 A-ring modified 19-norvitamin D analogs)
 IT Transcriptional regulation
 (two-dimensional alanine scanning mutational anal. of interaction
 between vitamin D receptor and A-ring modified 19-norvitamin D analogs)
 IT Vitamin D receptors
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
 (Biological study)
 (two-dimensional alanine scanning mutational anal. of interaction
 between vitamin D receptor and A-ring modified 19-norvitamin D analogs)
 IT 681830-58-0P 681830-59-1P **737757-31-2P**
 RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic
 preparation); BIOL (Biological study); PREP (Preparation)
 (two-dimensional alanine scanning mutational anal. of interaction
 between the vitamin D receptor and its ligands: studies of A-ring
 modified 19-norvitamin D analogs)
 IT 160399-81-5 736982-49-3
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (two-dimensional alanine scanning mutational anal. of interaction
 between the vitamin D receptor and its ligands: studies of A-ring
 modified 19-norvitamin D analogs)
 IT 736982-50-6P 736982-51-7P 736982-52-8P 736982-53-9P
736982-54-0P 737757-32-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(two-dimensional alanine scanning mutational anal. of interaction between the vitamin D receptor and its ligands: studies of A-ring modified 19-norvitamin D analogs)

IT 32222-06-3, 1,25-Dihydroxyvitamin D3 213250-70-5

RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)

(two-dimensional alanine scanning mutational anal. of interaction between vitamin D receptor and A-ring modified 19-norvitamin D analogs)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

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- (23) Yamamoto, K; Proc Natl Acad Sci USA 2000, V97, P1467 HCAPLUS

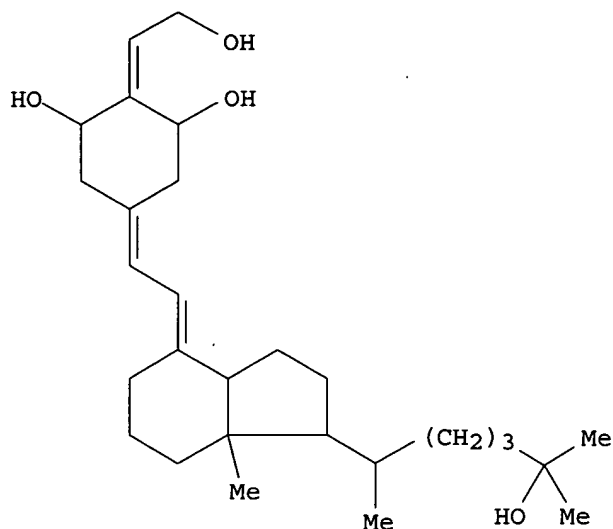
IT 737757-31-2P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(two-dimensional alanine scanning mutational anal. of interaction between the vitamin D receptor and its ligands: studies of A-ring modified 19-norvitamin D analogs)

RN 737757-31-2 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(2-hydroxyethylidene)-, (1 α ,2Z,3 β ,7E)- (9CI) (CA INDEX NAME)



IT 736982-54-0P

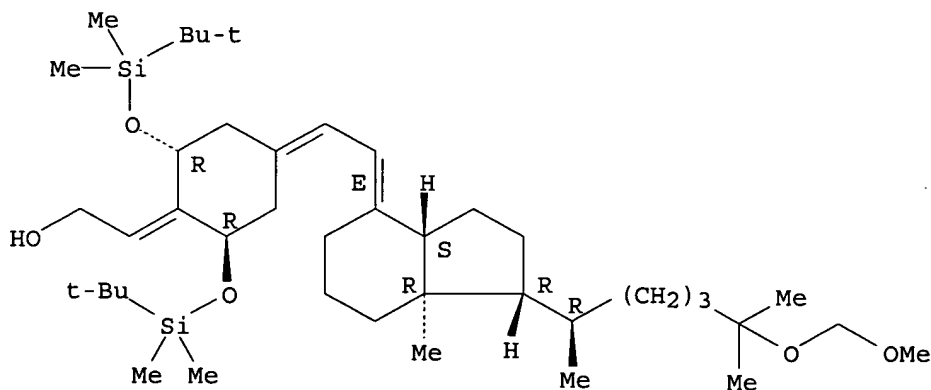
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(two-dimensional alanine scanning mutational anal. of interaction between the vitamin D receptor and its ligands: studies of A-ring modified 19-norvitamin D analogs)

RN 736982-54-0 HCAPLUS

CN Ethanol, [(1 α ,3 β ,7E)-1,3-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-25-(methoxymethoxy)-19-nor-9,10-secocholesta-5,7-dien-2-ylidene]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



L24 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:522163 HCAPLUS

DN 141:314479

ED Entered STN: 29 Jun 2004

TI New derivative of 1 α ,25-dihydroxy-19-norvitamin D3 with 3'-alkoxypropylidene moiety at C-2: synthesis, biological activity and conformational analysis

AU Glebocka, Agnieszka; Sicinski, Rafal R.; DeLuca, Hector F.

CS Department of Biochemistry, University of Wisconsin-Madison, Madison, WI,

53706, USA
 SO Journal of Steroid Biochemistry and Molecular Biology (2004), 89-90(1-5),
 25-30
 CODEN: JSBBEZ; ISSN: 0960-0760
 PB : Elsevier Science Ltd.
 DT Journal
 LA English
 CC 32-7 (Steroids)
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB In pursuit of novel biol. active Vitamin D compds. of potential
 therapeutic value, $1\alpha,25$ -dihydroxy-2-[3'-(methoxymethoxy)propylidene]-19-norvitamin D3 (I) was efficiently prepared
 in a convergent synthesis, starting with (-)-quinic acid and the protected
 25-hydroxy Grundmann ketone I. The key synthetic step involved Lythgoe
 type Wittig-Horner coupling of II, with the phosphine oxide III (R =
 SiCMe₃Me₂). Mol. modeling was employed to establish the A-ring
 conformation of the synthesized Vitamin I. Also, preliminary modeling of
 its complex with the rVDR was performed and interactions between ligand
 and the binding domain analyzed. Analog I was found to be only six times
 less potent than $1\alpha,25$ -(OH)₂D₃ in binding to the rat recombinant
 Vitamin D receptor (VDR). In comparison with hormone $1\alpha,25$ -(OH)₂D₃,
 it also showed slightly lower cellular HL-60-differentiation activity.
 Preliminary in vivo tests indicated unusually high calcemic activity of I.

ST Wittig Horner coupling vitamin D analog prepn; mol modeling conformation
 vitamin D analog; vitamin D receptor binding calcemic activity cellular
 differentiation analog

IT Wittig reaction
 (Wittig-Horner reaction; preparation of a norvitamin D3 analog with
 3'-alkoxypropylidene moiety at C-2 from (-)-quinic acid; its binding to
 the vitamin D receptor, and conformational anal.)

IT Asymmetric synthesis and induction
 Cell differentiation
 Conformation
 Human
 Molecular modeling
 (preparation of a norvitamin D3 analog with 3'-alkoxypropylidene moiety at
 C-2 from (-)-quinic acid; its binding to the vitamin D receptor, and
 conformational anal.)

IT Vitamin D receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of a norvitamin D3 analog with 3'-alkoxypropylidene moiety at
 C-2 from (-)-quinic acid; its binding to the vitamin D receptor, and
 conformational anal.)

IT **766529-87-7P**
 RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic
 preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of a norvitamin D3 analog with 3'-alkoxypropylidene moiety at
 C-2 from (-)-quinic acid; its binding to the vitamin D receptor, and
 conformational anal.)

IT 77-95-2 2916-76-9 144848-24-8 194227-13-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of a norvitamin D3 analog with 3'-alkoxypropylidene moiety at
 C-2 from (-)-quinic acid; its binding to the vitamin D receptor, and
 conformational anal.)

IT 665-27-0P 163217-18-3P 766529-88-8P 766529-89-9P 766529-90-2P
 766529-91-3P 766529-92-4P **766529-93-5P** 766529-94-6P
 766529-95-7P 766529-96-8P 766529-97-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of a norvitamin D3 analog with 3'-alkoxypropylidene moiety at C-2 from (-)-quinic acid; its binding to the vitamin D receptor, and conformational anal.)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Dame, M; Biochemistry 1986, V25, P4523 HCAPLUS
- (2) Evans, R; Science 1988, V240, P889 HCAPLUS
- (3) Jones, G; Physiol Rev 1998, V78, P1193 HCAPLUS
- (4) Ostrem, V; J Biol Chem 1987, V262, P14164 HCAPLUS
- (5) Rochel, N; Mol Cell 2000, V5, P173 HCAPLUS
- (6) Rotkiewicz, P; Proteins 2001, V44, P188 HCAPLUS
- (7) Sicinski, R; Bioorg Med Chem 1999, V7, P2877 HCAPLUS
- (8) Sicinski, R; J Med Chem 1994, V37, P3730 HCAPLUS
- (9) Sicinski, R; J Med Chem 1998, V41, P4662 HCAPLUS
- (10) Sicinski, R; J Med Chem 2002, V45, P3366 HCAPLUS
- (11) Suhara, Y; Bioorg Med Chem Lett 2000, V10, P1129 HCAPLUS
- (12) Suhara, Y; J Org Chem 2001, V66, P8760 HCAPLUS
- (13) Yamada, S; Med Res Rev 2003, V23, P89 HCAPLUS

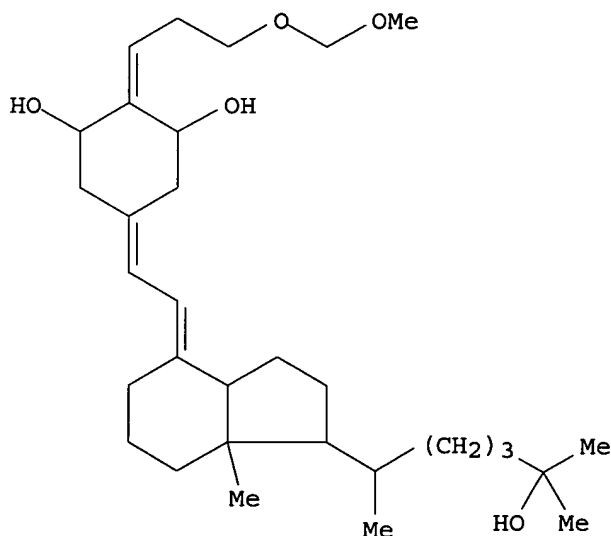
IT 766529-87-7P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of a norvitamin D3 analog with 3'-alkoxypropylidene moiety at C-2 from (-)-quinic acid; its binding to the vitamin D receptor, and conformational anal.)

RN 766529-87-7 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-[3-(methoxymethoxy)propylidene]-, (1 α ,3 β ,6E,7E)- (9CI) (CA INDEX NAME)



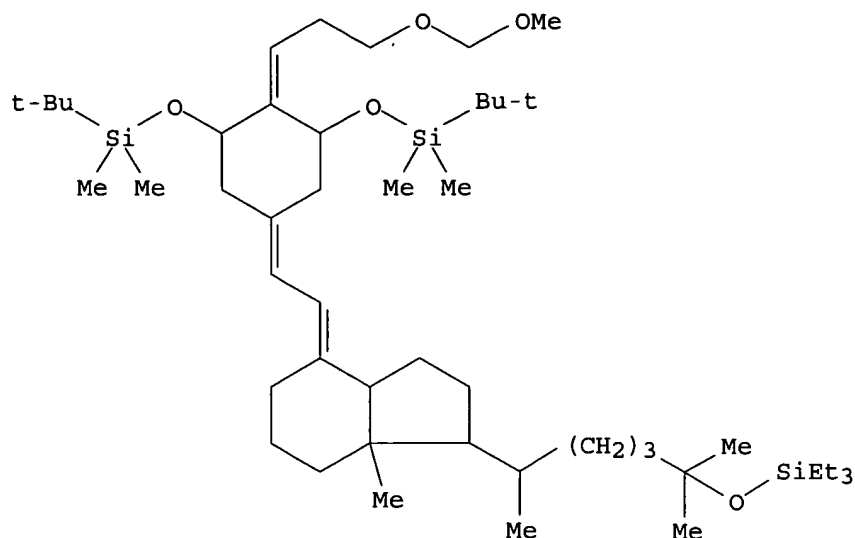
IT 766529-93-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of a norvitamin D3 analog with 3'-alkoxypropylidene moiety at C-2 from (-)-quinic acid; its binding to the vitamin D receptor, and conformational anal.)

RN 766529-93-5 HCAPLUS

CN Silane, [[(1 α ,3 β ,6E,7E)-2-[3-(methoxymethoxy)propylidene]-25-[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7,10(19)-triene-1,3-diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



L24 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:333691 HCAPLUS
 DN 140:357542
 ED Entered STN: 23 Apr 2004
 TI Preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D derivatives as pharmaceuticals
 IN Yamada, Sachiko; Shimizu, Masato; Iwasaki, Yukiko
 PA Chugai Seiyaku Kabushiki Kaisha, Japan
 SO PCT Int. Appl., 168 pp.
 CODEN: PIXXD2
 DT Patent
 LA Japanese
 IC ICM C07C401-00
 ICS A61K031-59; A61P035-00; A61P037-02; A61P043-00
 CC 32-7 (Steroids)
 Section cross-reference(s): 1, 63

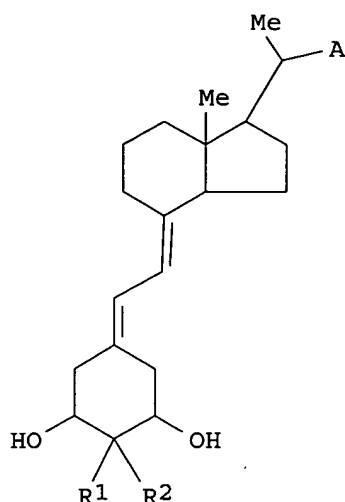
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004033420	A1	20040422	WO 2003-JP13053	20031010
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI JP 2002-297366	A	20021010		
JP 2003-24183	A	20030131		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2004033420	ICM	C07C401-00
	ICS	A61K031-59; A61P035-00; A61P037-02; A61P043-00

OS MARPAT 140:357542
 GI



I

- AB The title compds. I [R1 and R2 are the same or different and each represents hydroxy, etc.; and A represents hydrogen, unsubstituted linear or branched alkyl, etc.] are prepared. The bioactivity of the title compds. was demonstrated. A process for preparing I is disclosed.
- ST dihydroxynorvitamin D deriv prepn pharmaceutical
- IT Vitamin D receptors
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D derivs. as pharmaceuticals)
- IT Cell differentiation
 (related diseases; preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D derivs. as pharmaceuticals)
- IT 681433-61-4P 681433-69-2P
 RL: BYP (Byproduct); PREP (Préparation)
 (preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D derivs. as pharmaceuticals)
- IT 681433-59-0P 681433-60-3P 681830-46-6P 681830-47-7P 681830-48-8P
 681830-49-9P 681830-50-2P 681830-51-3P 681830-52-4P 681830-53-5P
 681830-55-7P 681830-56-8P 681830-57-9P 681830-58-0P 681830-59-1P
681830-60-4P 681830-61-5P 681830-62-6P 681830-63-7P
 681830-64-8P 681830-65-9P **681830-66-0P 681830-67-1P**
 681830-68-2P 681830-69-3P 681830-70-6P 681830-71-7P 681830-72-8P
 681830-73-9P **681830-74-0P 681830-75-1P** 681830-76-2P
 681830-77-3P 681830-78-4P 681830-79-5P 681830-80-8P 681830-81-9P
 681830-82-0P 681830-83-1P **681830-84-2P 681830-85-3P**
 681830-86-4P 681830-87-5P 681830-88-6P 681830-89-7P 681830-95-5P
 681830-96-6P 681856-65-5P 681856-66-6P 681856-67-7P 681857-01-2P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D derivs. as pharmaceuticals)
- IT 50-14-6, Vitamin D2 98-59-9, Toluenesulfonyl chloride 100-39-0, Benzyl bromide 107-30-2, Chloromethyl methyl ether 544-92-3, Copper (I) cyanide 829-85-6, Diphenylphosphine 917-54-4, Methyl lithium 994-30-9, Chlorotriethylsilane 1779-49-3, Methyl triphenylphosphonium bromide 2537-48-6, Diethylcyanomethylphosphonate 2916-76-9, Methyl trimethylsilylacetate 18162-48-6, tert-Butyldimethylsilyl chloride 27607-77-8, Trimethylsilyl trifluoromethanesulfonate 86864-60-0, (2-Bromoethoxy)-tert-butyldimethylsilane 104651-47-0 139619-80-0

141404-09-3 144848-24-8 159685-68-4 213250-68-1 681434-22-0
681434-23-1 681831-12-9

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D
derivs. as pharmaceuticals)

IT 139131-74-1P 139131-75-2P 139131-76-3P 147725-63-1P 681433-62-5P
681433-63-6P 681433-64-7P 681433-65-8P 681433-66-9P 681433-67-0P
681433-68-1P 681433-70-5P 681433-71-6P 681433-72-7P 681433-73-8P
681433-74-9P 681433-75-0P 681433-76-1P 681433-77-2P 681433-78-3P
681433-79-4P 681433-80-7P 681433-81-8P 681433-82-9P 681433-83-0P
681433-84-1P 681433-85-2P 681433-86-3P 681433-87-4P 681433-88-5P
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681434-09-3P 681434-10-6P 681434-11-7P 681434-12-8P 681434-13-9P
681434-14-0P 681434-15-1P 681434-16-2P 681434-17-3P 681434-18-4P
681434-19-5P 681434-20-8P 681830-90-0P 681830-91-1P 681830-92-2P
681830-93-3P 681830-94-4P 681830-97-7P 681830-98-8P 681830-99-9P
681831-00-5P 681831-01-6P 681831-02-7P 681831-03-8P
681831-04-9P 681831-05-0P 681831-06-1P 681831-07-2P
681831-08-3P 681831-09-4P 681831-10-7P 681831-11-8P
681856-68-8P 681856-69-9P 681856-70-2P
681856-71-3P 681857-02-3P 681857-03-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D
derivs. as pharmaceuticals)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Wisconsin Alumni Research Foundation; JP 06-321894 A 1994 HCAPLUS
- (2) Wisconsin Alumni Research Foundation; US 5536713 A 1994 HCAPLUS
- (3) Wisconsin Alumni Research Foundation; EP 619306 A1 1994 HCAPLUS
- (4) Wisconsin Alumni Research Foundation; WO 017405 A2 2001
- (5) Wisconsin Alumni Research Foundation; WO 0174765 A1 2001 HCAPLUS
- (6) Wisconsin Alumni Research Foundation; WO 0174766 A1 2001 HCAPLUS
- (7) Wisconsin Alumni Research Foundation; WO 0192221 A1 2001 HCAPLUS
- (8) Wisconsin Alumni Research Foundation; EP 1210327 A2 2001 HCAPLUS
- (9) Wisconsin Alumni Research Foundation; EP 1268415 A1 2001 HCAPLUS
- (10) Wisconsin Alumni Research Foundation; EP 1268416 A1 2001 HCAPLUS
- (11) Wisconsin Alumni Research Foundation; EP 1301189 A2 2001 HCAPLUS
- (12) Wisconsin Alumni Research Foundation; US 200313691 A1 2001
- (13) Wisconsin Alumni Research Foundation; JP 2003505447 A 2001
- (14) Wisconsin Alumni Research Foundation; JP 2003529581 A 2001
- (15) Wisconsin Alumni Research Foundation; US 6316642 B1 2001 HCAPLUS
- (16) Wisconsin Alumni Research Foundation; US 6392071 B1 2001 HCAPLUS
- (17) Wisconsin Alumni Research Foundation; US 6603031 B1 2001 HCAPLUS

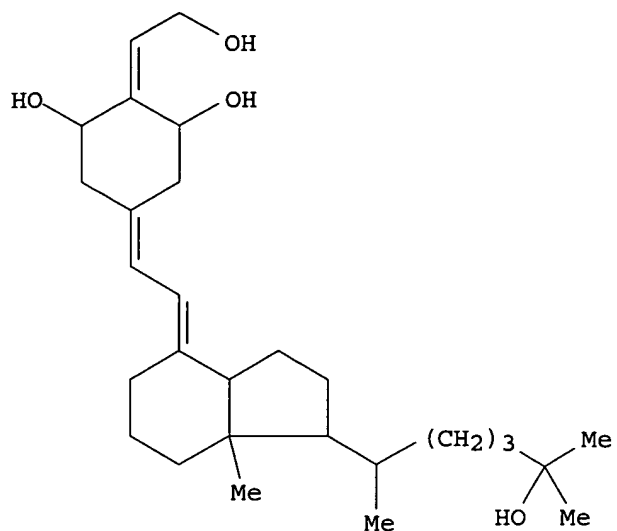
IT 681830-60-4P 681830-61-5P 681830-66-0P
681830-67-1P 681830-74-0P 681830-75-1P
681830-84-2P 681830-85-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

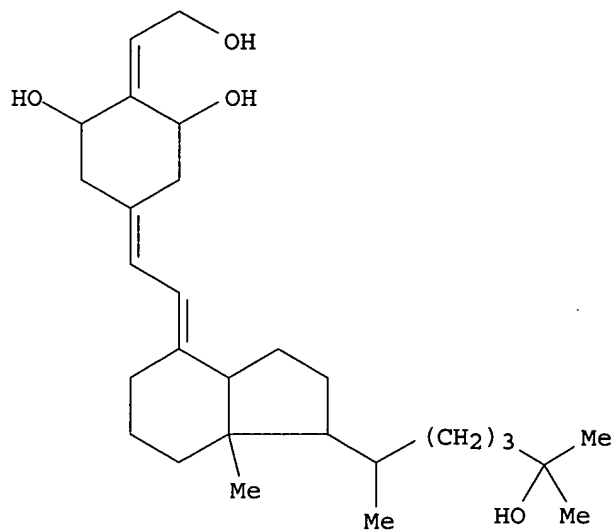
(preparation of 2,2-di-substituted 1 α ,25-dihydroxy-19-norvitamin D
derivs. as pharmaceuticals)

RN 681830-60-4 HCAPLUS

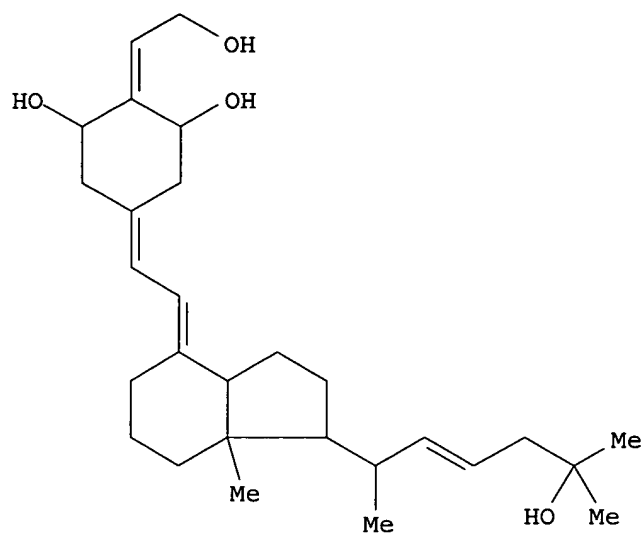
CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(2-hydroxyethylidene)-,
(1 α ,2E,3 β ,7E,20S) - (9CI) (CA INDEX NAME)



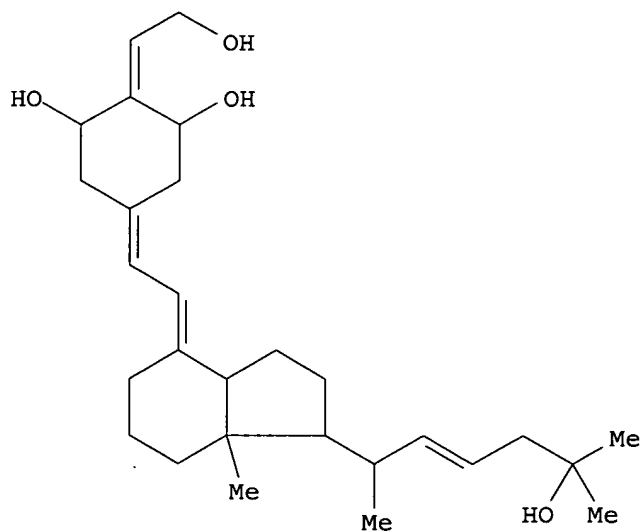
RN 681830-61-5 HCAPLUS
 CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(2-hydroxyethylidene)-,
 (1 α ,2Z,3 β ,7E,20S) - (9CI) (CA INDEX NAME)



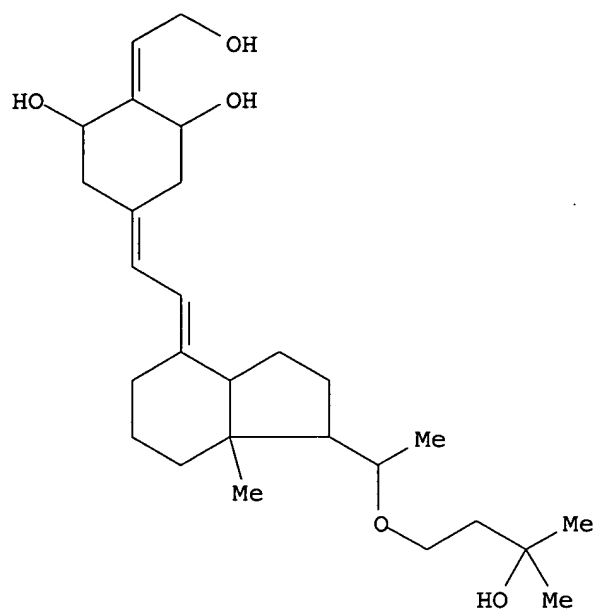
RN 681830-66-0 HCAPLUS
 CN 19-Nor-9,10-secocholesta-5,7,22-triene-1,3,25-triol, 2-(2-
 hydroxyethylidene)-, (1 α ,2E,3 β ,7E,22E) - (9CI) (CA INDEX NAME)



RN 681830-67-1 HCAPLUS
 CN 19-Nor-9,10-secocholesta-5,7,22-triene-1,3,25-triol, 2-(2-hydroxyethylidene)-, (1 α ,2Z,3 β ,7E,22E)- (9CI) (CA INDEX NAME)

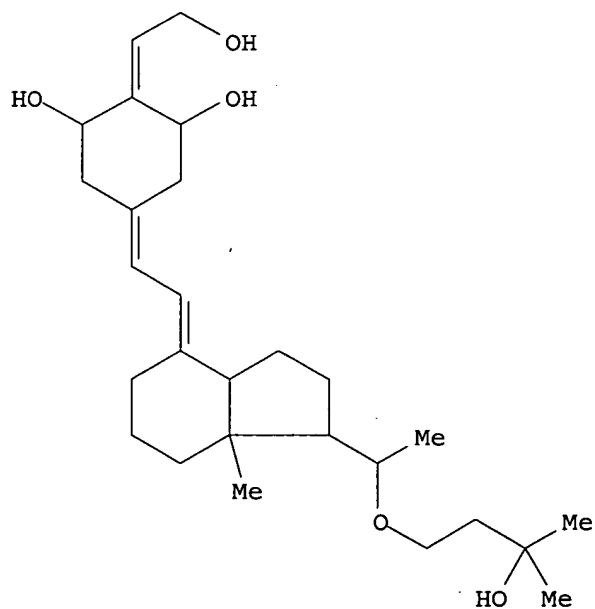


RN 681830-74-0 HCAPLUS
 CN 1,3-Cyclohexanediol, 2-(2-hydroxyethylidene)-5-[[octahydro-1-[1-(3-hydroxy-3-methylbutoxy)ethyl]-7a-methyl-4H-inden-4-ylidene]ethylidene]-, stereoisomer (9CI) (CA INDEX NAME)



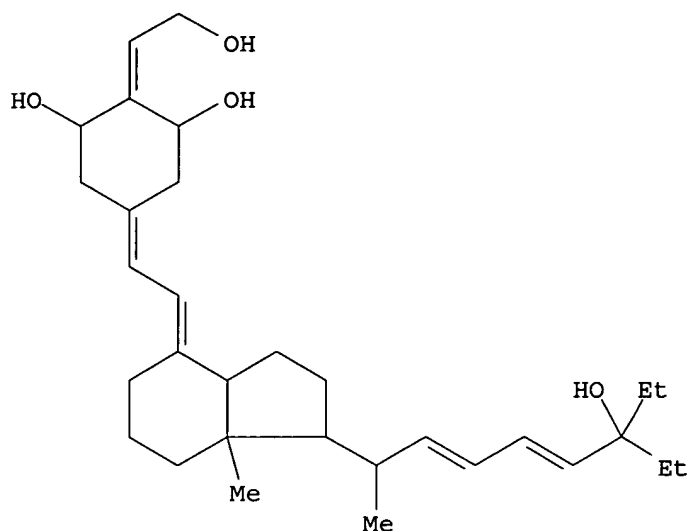
RN 681830-75-1 HCAPLUS

CN 1,3-Cyclohexanediol, 2-(2-hydroxyethylidene)-5-[[octahydro-1-[1-(3-hydroxy-3-methylbutoxy)ethyl]-7a-methyl-4H-inden-4-ylidene]ethylidene]-, stereoisomer (9CI) (CA INDEX NAME)



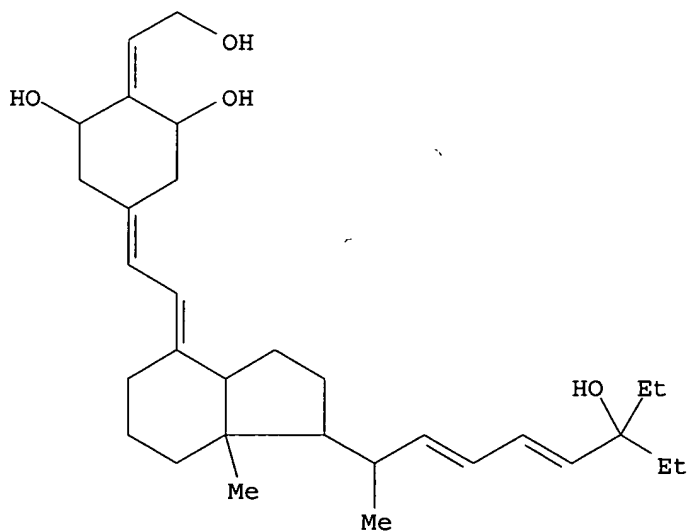
RN 681830-84-2 HCAPLUS

CN 1,3-Cyclohexanediol, 5-[[1-(6-ethyl-6-hydroxy-1-methyl-2,4-octadienyl)octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-2-(2-hydroxyethylidene)-, stereoisomer (9CI) (CA INDEX NAME)



RN 681830-85-3 HCAPLUS

CN 1,3-Cyclohexanediol, 5-[[1-(6-ethyl-6-hydroxy-1-methyl-2,4-octadienyl)octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-2-(2-hydroxyethylidene)-, stereoisomer (9CI) (CA INDEX NAME)

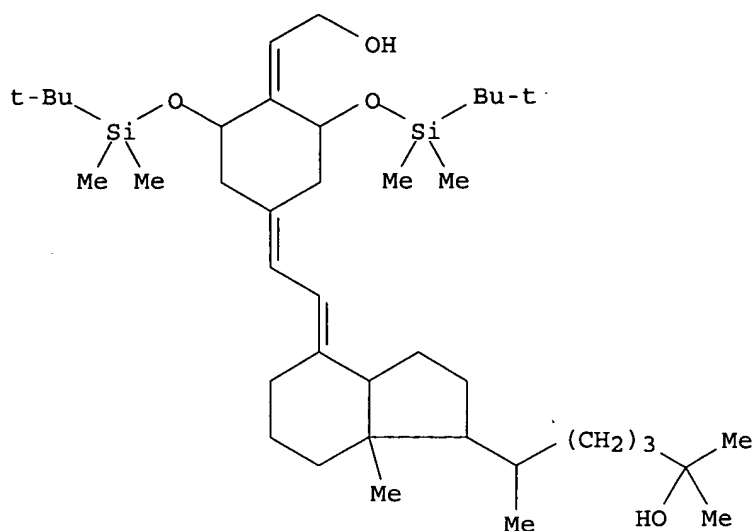


IT 681831-02-7P 681831-07-2P 681831-08-3P
681831-10-7P 681856-69-9P 681856-70-2P
681856-71-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2,2-di-substituted 1α,25-dihydroxy-19-norvitamin D derivs. as pharmaceuticals)

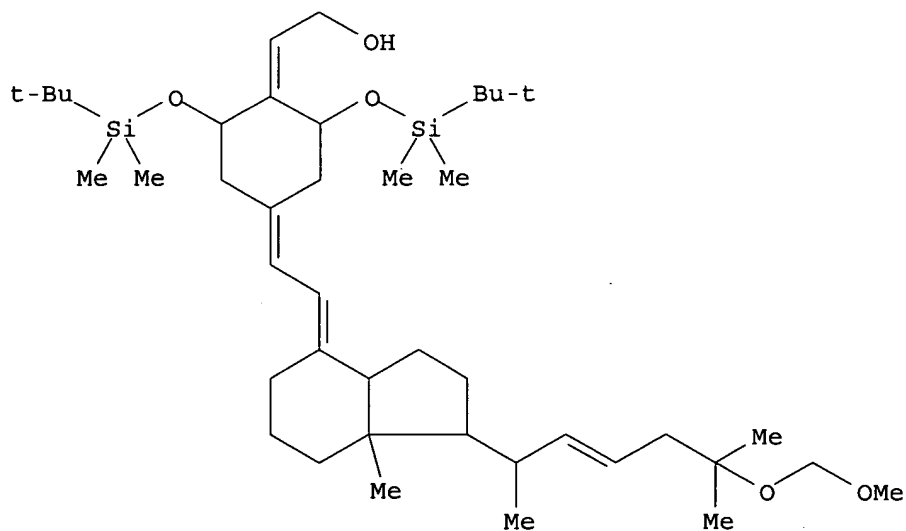
RN 681831-02-7 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-dien-25-ol, 1,3-bis[[1,1-dimethylethyl)dimethylsilyl]oxy]-2-(2-hydroxyethylidene)-, (1α,2E,3β,7E,20S) - (9CI) (CA INDEX NAME)



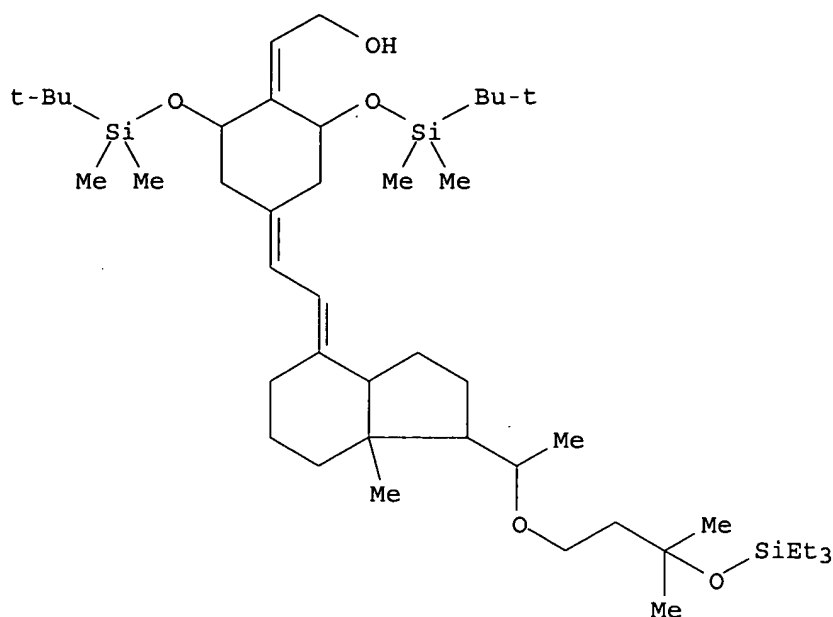
RN 681831-07-2 HCAPLUS

CN Ethanol, 2-[(1 α ,3 β ,7E,22E)-1,3-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-25-(methoxymethoxy)-19-nor-9,10-secocholesta-5,7,22-trien-2-ylidene]-, (2E)-(9CI)] (CA INDEX NAME)



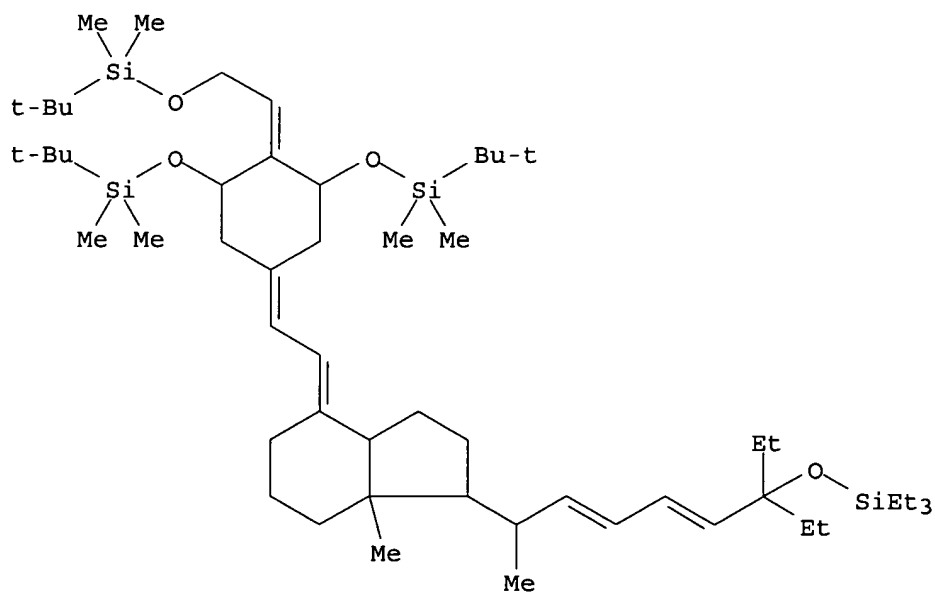
RN 681831-08-3 HCAPLUS

CN Ethanol, 2-[2,6-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-4-[[octahydro-7a-methyl-1-[1-[3-methyl-3-[(triethylsilyl)oxy]butoxy]ethyl]-4H-inden-4-ylidene]ethylidene]cyclohexylidene]-, stereoisomer (9CI)] (CA INDEX NAME)



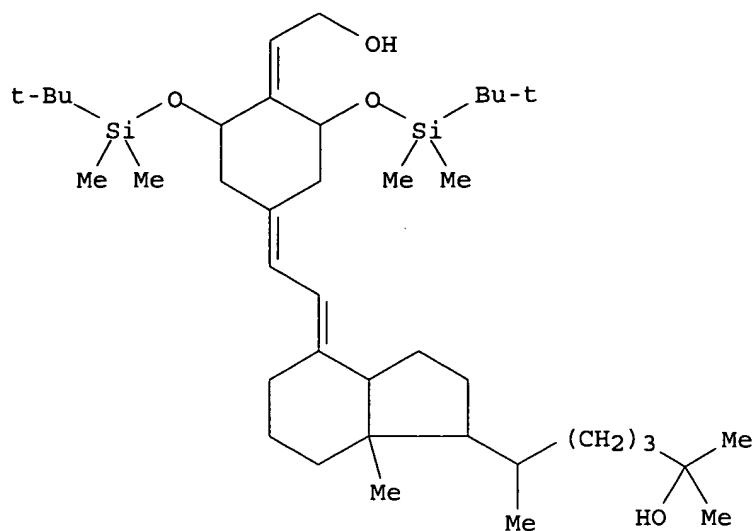
RN 681831-10-7 HCAPLUS

CN Silane, [[(1R,3R)-2-[(1E)-2-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethylidene]-5-[(2E)-[(1R,3aS,7aR)-1-[(1R,2E,4E)-6-ethyl-1-methyl-6-[(triethylsilyl)oxy]-2,4-octadienyl]octahydro-7a-methyl-4H-inden-4-ylidene]ethylidene]-1,3-cyclohexanediyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



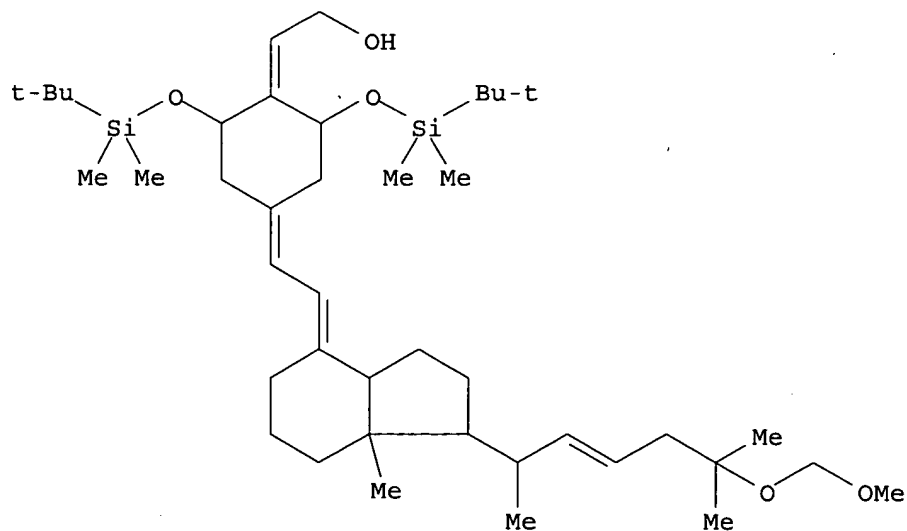
RN 681856-69-9 HCAPLUS

CN 19-Nor-9,10-secocholesta-5,7-dien-25-ol, 1,3-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2-(hydroxyethylidene)-, (1α,2Z,3β,7E,20S)- (9CI) (CA INDEX NAME)



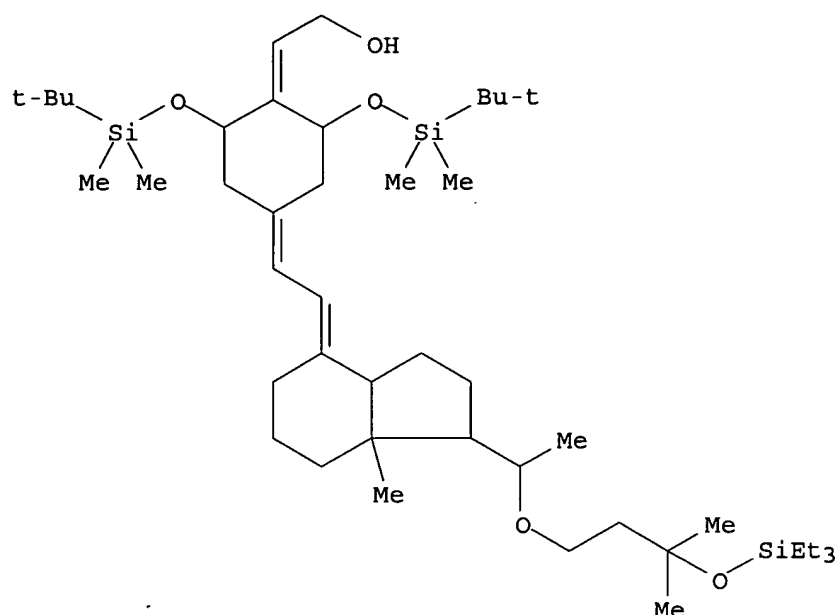
RN 681856-70-2 HCAPLUS

CN Ethanol, 2-[(1 α ,3 β ,7E,22E)-1,3-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-25-(methoxymethoxy)-19-nor-9,10-secocholesta-5,7,22-trien-2-ylidene]-, (2Z)- (9CI) (CA INDEX NAME)



RN 681856-71-3 HCAPLUS

CN Ethanol, 2-[2,6-bis[[[(1,1-dimethylethyl)dimethylsilyl]oxy]-4-[[octahydro-7a-methyl-1-[1-[3-methyl-3-[(triethylsilyl)oxy]butoxy]ethyl]-4H-inden-4-ylidene]ethylidene]cyclohexylidene]-, stereoisomer (9CI) (CA INDEX NAME)



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CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 13:34:53 ON 18 APR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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L25 ANSWER 1 OF 1 USPATFULL on STN
AN 2004:292762 USPATFULL
TI 2-Propylidene-19-nor-vitamin D compounds
IN DeLuca, Hector F., Deerfield, WI, UNITED STATES
Sicinski, Rafal R., Warsaw, POLAND
Glebocka, Agnieszka, Warsaw, POLAND
Plum, Lori A., Madison, WI, UNITED STATES
PI US 2004229851 A1 20041118
AI US 2004-821479 A1 20040409 (10)
PRAI US 2003-461958P 20030410 (60)
DT Utility
FS APPLICATION
LREP ANDRUS, SCEALES, STARKE & SAWALL, LLP, 100 EAST WISCONSIN AVENUE, SUITE
1100, MILWAUKEE, WI, 53202
CLMN Number of Claims: 109
ECL Exemplary Claim: 1
DRWN 6 Drawing Page(s)
LN.CNT 2351
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB 2-propylidene-19-nor-vitamin D compounds are disclosed as well as
pharmaceutical uses for these compounds and methods of synthesizing
these compounds. These compounds are characterized by high bone calcium
mobilization activity and high intestinal calcium transport activity.
This results in novel therapeutic agents for the treatment and
prophylaxis of diseases where bone formation is desired, particularly
osteoporosis, as well as autoimmune diseases such as multiple sclerosis,

diabetes mellitus and lupus. These compounds also exhibit pronounced activity in arresting the proliferation of undifferentiated cells and inducing their differentiation to the monocyte thus evidencing use as an anti-cancer agent and for the treatment of skin diseases such as psoriasis. These compounds also increase both breaking strength and crushing strength of bones evidencing use in conjunction with bone replacement surgery such as hip and knee replacements.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

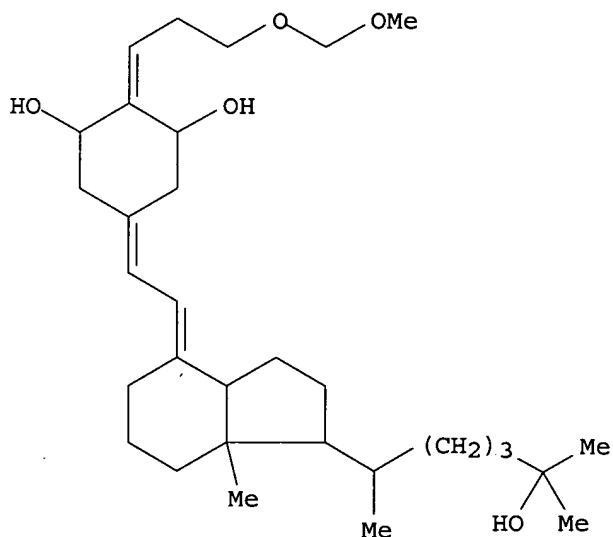
IT 766529-87-7P 781664-40-2P 781664-41-3P

781664-71-9P 781664-72-0P

(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics and antitumor agents)

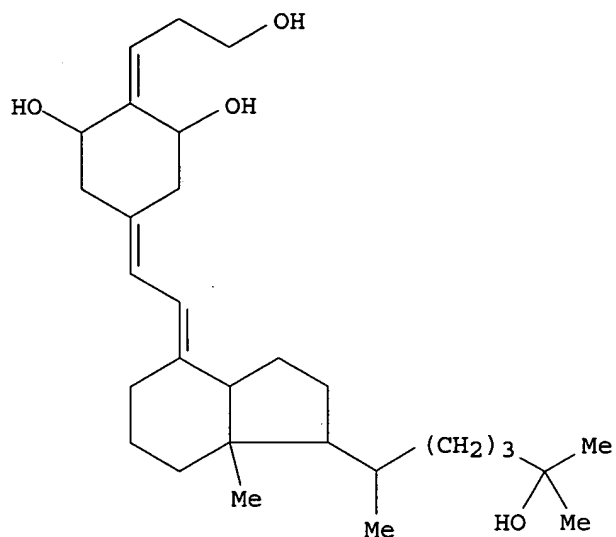
RN 766529-87-7 USPATFULL

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-[3-(methoxymethoxy)propylidene]-, (1 α ,3 β ,6E,7E) - (9CI) (CA INDEX NAME)



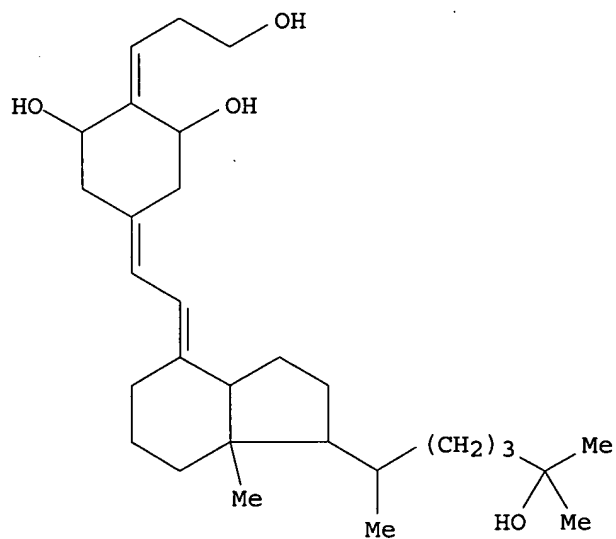
RN 781664-40-2 USPATFULL

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-, (1 α ,2E,3 β ,7E) - (9CI) (CA INDEX NAME)



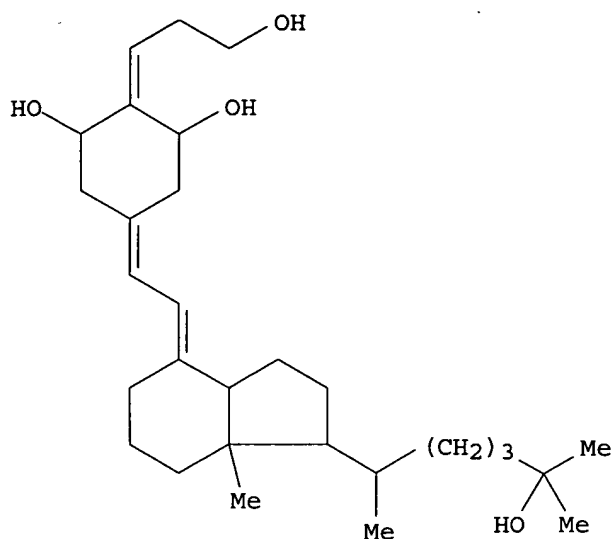
RN 781664-41-3 USPATFULL

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2Z,3 β ,7E) - (9CI) (CA INDEX NAME)



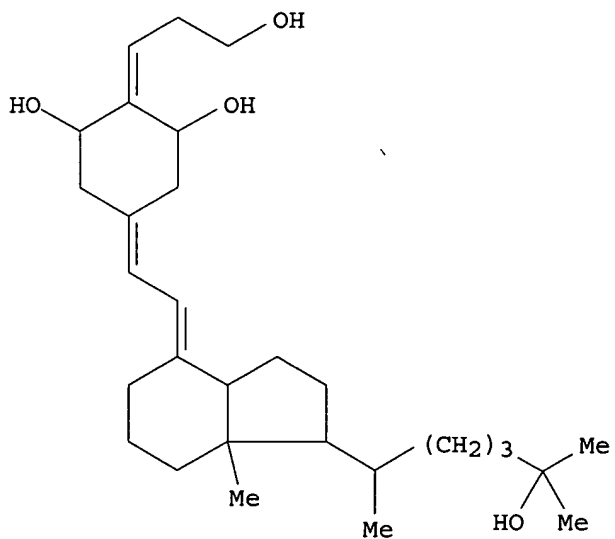
RN 781664-71-9 USPATFULL

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2E,3 β ,7E,20S) - (9CI) (CA INDEX NAME)



RN 781664-72-0 USPATFULL

CN 19-Nor-9,10-secocholesta-5,7-diene-1,3,25-triol, 2-(3-hydroxypropylidene)-
, (1 α ,2Z,3 β ,7E,20S)- (9CI) (CA INDEX NAME)

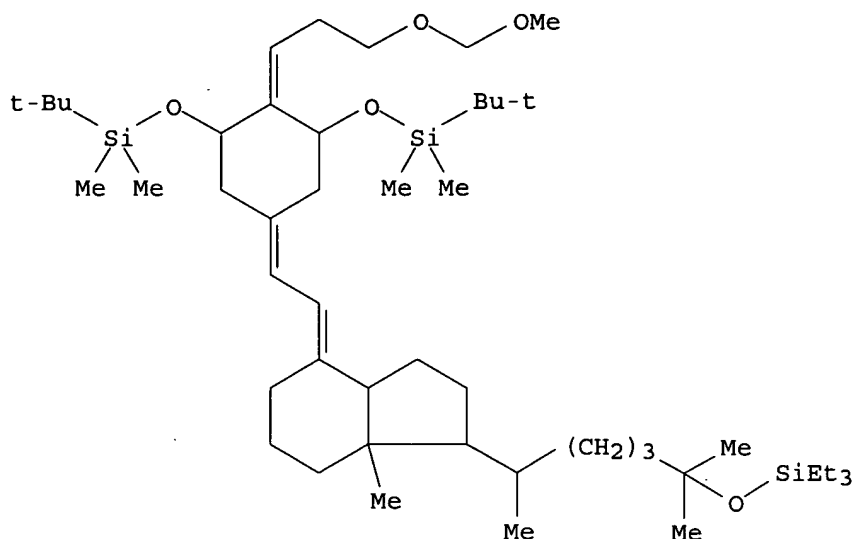


IT 766529-93-5P 781664-39-9P 781664-70-8P

(preparation of 2-propylidene-19-norvitamin D compds. as antiosteoporotics
and antitumor agents)

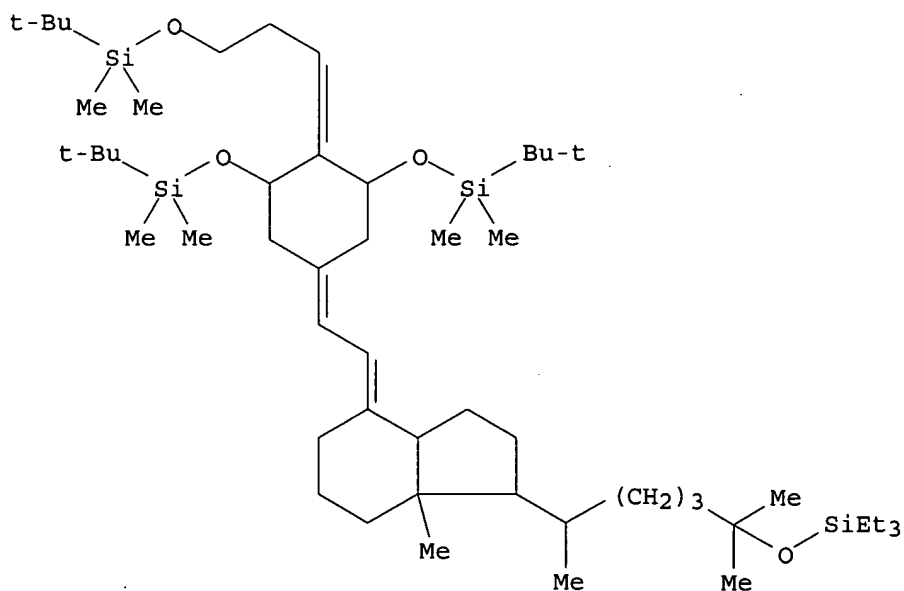
RN 766529-93-5 USPATFULL

CN Silane, [[(1 α ,3 β ,6E,7E)-2-[3-(methoxymethoxy)propylidene]-25-
[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7,10(19)-triene-1,3-
diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



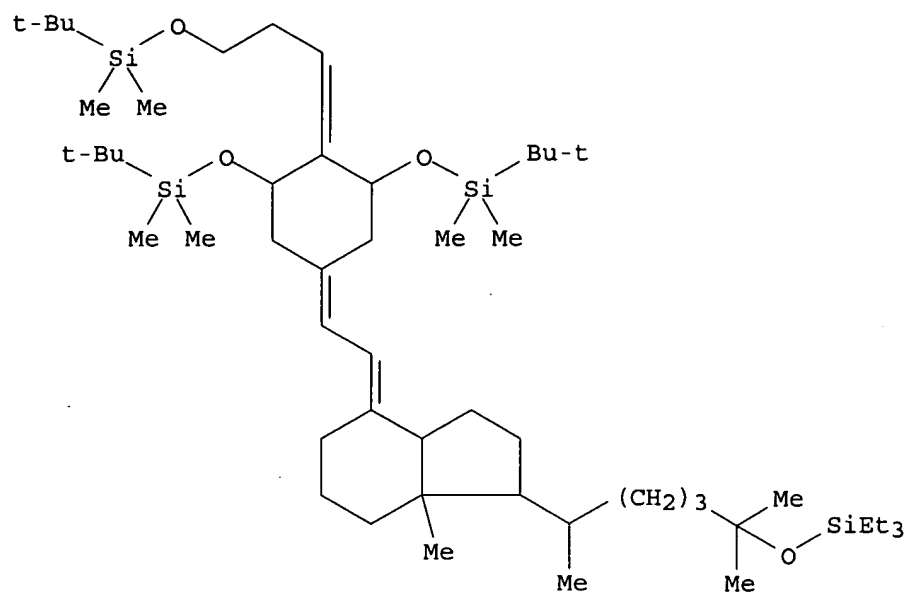
RN 781664-39-9 USPATFULL

CN Silane, [[[1 α ,2E,3 β ,7E)-2-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]propylidene]-25-[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7-diene-1,3-diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



RN 781664-70-8 USPATFULL

CN Silane, [[[1 α ,2Z,3 β ,7E)-2-[3-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]propylidene]-25-[(triethylsilyl)oxy]-19-nor-9,10-secocholesta-5,7-diene-1,3-diyl]bis(oxy)]bis[(1,1-dimethylethyl)dimethyl- (9CI) (CA INDEX NAME)



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